Bargaining for Freedom:

A Person-by-Situation Approach to Studying Plea-Bargain Decision-Making

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Dedication

This thesis is dedicated to my family. Dad, from a young age you encouraged me to think about broad societal issues and, if possible, to contribute to their rectification. Mom, you instilled a strong sense of right and wrong in me, which motivates my focus on justice and fairness. Rachel and Ali, you were my first “students” in our imaginary classroom, and our explorations in nature made science exciting and real.

Abstract

Discounting scholars have studied decisions about monetary rewards, or gains, and found that the probability and delay of the receipt of those gains influence their subjective value. Plea-bargain decisions inherently contain the features of probability and delay in the decision context: Trial's outcome is uncertain while the plea offer's outcome is certain, and trial is delayed while the plea offer is relatively immediate. This dissertation's four studies apply discounting paradigms to plea-bargain decision-making and find that probability of trial conviction and delay until trial influence decision-making. Additionally, Studies 3 and 4 highlight how other situational features, Factual Innocence and Attorney Advice, influence plea decisions. Overall, the person-by-situation approach from personality and social psychology adopted by this dissertation offers discounting scholars a richer understanding of the personal and situational factors that can influence decision-making.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction and Theoretical Background

Bargaining for Freedom: A Person-by-Situation Approach to Studying Plea-Bargain Decision-Making

The criminal justice system of the United States has long been the subject of cross-discipline analysis and critique (see, e.g., Butler, 1995; Clemens, 2014; Hagan, 1973; Penrod & Hastie, 1979; Reitz, 2018; Tonry, 1998). Two contemporary concerns are the exceptionally high incarceration rates and continued use of the death penalty in the United States relative to the rest of the world (see, e.g., Reitz, 2017) as well as the racial inequity of the system (e.g., Eberhardt et al., 2006). This has evoked the broad two-pronged question: *How did we get here? And how do we change things?* To date, scholars have focused largely on the bloated criminal codes in the U.S. (see, e.g., Manhattan Project, 2017) and the harshness of criminal sentences, disproportionately affecting people of color both in enforcement of criminal laws and in harshness of sentencing (see, e.g., Kutateladze et al., 2014).

In this dissertation, I take a different tack. If sweeping change in the criminal justice system is needed, then it is important to understand how people enter the criminal justice system in the first place. Criminal cases begin with the collection of factual evidence by law enforcement, which is passed on to government prosecutors, who choose whether to charge someone with a crime based on the evidence collected. Based on media depictions of the criminal justice system,[1] and even psychology-and-law research (Devine et al., 2001; Kovera & Levett, 2015), one might think that the next step is a jury trial. To the contrary. "Plea bargaining is a defining, if not *the* defining, feature" of the

[1] Such as in the classic film, *My Cousin Vinny*.

criminal justice system (Brown & Bunnell, 2006). In 2003, the Bureau of Justice Statistics reported 75,573 federal criminal cases, of which approximately 95% were disposed of by a guilty plea, or plea bargain (Devers, 2011). Because 95% of cases were *disposed of* by guilty plea, more than 95% of cases, likely nearly all cases, involved a plea-bargain decision.

In a plea-bargain decision, a person charged with a crime has the choice whether to accept an offer made by the prosecutor to accept guilt, forego a criminal trial, and go straight to the sentencing phase in which the offered sentence is the presumptive sentence. Most people accept that offer. But is that because they are guilty and the evidence is stacked up against them? Or are there other features of the plea-bargain-choice context that influence that decision?

I use *discounting* as a theoretical starting point to understand plea bargain choices because discounting researchers study binary choices between one option that is uncertain and delayed and a second option that is certain and immediate. In the plea-bargaining setting, trial is uncertain and delayed, and the plea bargain is relatively certain and immediate. I was drawn to the potential utility of discounting paradigms to explain plea-bargain decision-making because the general psychological patterns described by discounting research might help explain why so many people accept plea bargains. Specifically, discounting research has shown that, in general, people prefer certain and immediate outcomes (for reviews see Frederick, Loewenstein, & O'Donoghue, 2002; McKerchar & Renda, 2012), which if applied to a plea-bargaining setting could show why people prefer the plea offer over trial.

In addition, discounting scholars did not simply demonstrate a general pattern of preference for certain and immediate outcomes; they identified two contextual features that influence decisions: probability and delay. This dissertation project breaks new ground in two key ways. First, it is the continuation of my earlier work as a graduate student at the University of Minnesota in which I apply discounting theory and methodologies to plea bargaining. But there are some important differences between past discounting work and my work. Plea bargaining is a decisional situation in which the entity being decided about is a person's own freedom. In most other discounting work, the entity, or *commodity*, being decided about is the receipt of money. Deciding about the receipt of money is different from deciding about the potential loss of freedom in the criminal justice system in that it involves a different commodity, but also the former commodity is relatively positive (referred to as a "gain" context) while the latter is negative (referred to as a "loss" context). Studying discounting in plea bargaining enables conclusions about discounting in a non-monetary loss context but also has implications for the most common method of resolving cases in the criminal justice system.

Literature Review

Social psychology embraces the possibility of complex causes of human behavior, encapsulated by Kurt Lewin's conceptual formula: $B = f(P, S)$. Although the field of judgment and decision making (JDM) is "something of an orphan field, lacking a dedicated and exclusive academic home" (Gilovich & Griffin, 2010, p. 542), it has a home within social psychology. Social psychologists have long been interested in human decisions as a key behavior of study (e.g., to join a group; Festinger, 1964) as well as the

process by which those decisions are made, especially through persuasion and attitude change (e.g., Sherif & Hovland, 1961).

JDM scholars have applied much of their effort to the systematic study of economic decisions.[2] For example, *loss aversion* and the *endowment effect* are two staples within the JDM tradition, and they were empirically studied using situations involving monetary losses and gains, respectively (Kahneman, Knetsch, & Thaler, 1990; Tversky & Kahneman, 1991). Within JDM, and conceptually related to Lowenstein's (1987) *temporal framing*, Buehler and McFarland's (2001) *temporal focus*, and Tversky and Kahneman's (1986) *framing of risk aversion/seeking*, scholars have studied a phenomenon called *discounting*. Certain features of monetary-decision contexts are especially important to predict behavior: probability of the outcome, delay/time of occurrence, and commodity valence (gains vs. losses, termed the "sign effect"[3]). Especially of interest to social psychologists, commodity *type* seems to matter, too, as revealed by research in the last decade. In the context of losses, Harris (2012) found descriptively different patterns of behavior when the commodity was lost money or lost property compared to non-monetary losses (e.g., bee sting, losing a friend). In particular, with monetary commodities, the median participant chose to put off losses as long as

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[2] This is partly attributable to the influence of behavioral economics, and especially Herbert Simon, on the field (Gilovich & Griffin, 2010). At the birth of its field, behavioral economics challenged and tested economic assumptions and models, and the field continues to do so.

[3] Findings of the "sign effect" is within the field of behavioral economics because it challenges the rational-economic assumption that neither outcome valence nor outcome magnitude affects the impact of delay, and yet both have been empirically shown to affect decisions (see, e.g., Hardisty et al., 2013). Tversky and Kahneman (1992) also found different "risk attitudes" for gains and losses (p. 307), first described as risk aversion for gains and risk seeking for losses (Tversky & Kahneman, 1991).

possible and chose to experience gains without any delay. A non-monetary gain of receiving sincere praise from someone whose opinion means a great deal to you showed an overwhelming choice for immediate praise, but the non-monetary losses of a bee sting and losing an irreplaceable personal photograph, for example, showed bi-modality at the poles with many people choosing to get the losses over with and many others choosing to put off the loss as long as possible.

In this dissertation, I argue that the phenomenon of discounting of uncertain and delayed outcomes is useful for understanding and studying plea-bargain decision-making. In addition, social psychology's interactional strategy enables a more comprehensive conceptual framework of personal and situational factors influencing plea bargaining decisions. The proposed series of four studies provides an opportunity to replicate and expand a recent finding in classic discounting studies, that individuals discount criminal sanctions (i.e., the commodity in plea bargaining) in similar ways as monetary commodities. Consistent with the interactional strategy, in Study 1, using Clatch and Borgida's (2021) Study 3 archival data, I will examine whether various individual differences and other person-level variables interact with the situational features of delay and probability. Study 2 will attempt to replicate Clatch and Borgida's Study 3 (2021) finding that Probability and Delay interact to predict plea-bargain decisions and, in particular, to determine whether the outcome variable's measurement method can be made more efficient without significantly altering the effect. Studies 3 and 4 will add key situational manipulations of attorney advice and factual innocence to determine whether there are situational modifiers of the probability and delay discounting of plea bargaining.

Before describing the details of the series of studies, this literature review will (1) describe the technical methodological aspects of discounting research to set up subsequent sections, (2) explain how discounting paradigms can be applied to plea-bargain decision-making, and then (3) elaborate on what social psychology's person x situation framework adds to the study of discounting in plea-bargain decision making.

Discounting

The traditional way of assessing discounting involves a complex series of questions to triangulate the subjective value that people assign to an offered outcome. In particular, experimentalists ask participants a series of binary, forced-choice questions, varying a feature of the choice context (e.g., delay or probability) to see how it affects decisions. For decades, however, the research on discounting has focused on single-feature discounting of monetary gains (Clatch & Borgida, 2021; Harris, 2012). This means that participants were given choices between two monetary outcomes (e.g., $100 vs. $20) that differed on a single feature (e.g., delay or probability), so the choice might be between receiving $100 in 1 month versus receiving $20 now (varying based on delay). By experimentally manipulating (most often varying within-participants) the length of delay of the $100 option, researchers can empirically determine the subjective value of $100 at different delays. The longer the delay of receipt of $100, the lower the payout a person is willing to accept as an immediate payout. In other words, the delay of a monetary gain is undesirable. The robust finding across the past two decades of research is that people prefer immediate gains over delayed gains, such that they are willing to accept lower amounts of money (e.g., $20) to receive the monetary gain immediately, foregoing the larger amount of money (e.g., $100), and this pattern has been

termed *delay discounting*. An analogous paradigm has been applied to empirically examine *probability discounting*: choose between $100 with 50% of receipt versus $20 with certainty of receipt. Again, for monetary gains, people prefer certainty and are willing to accept considerably less than even the "expected value"[4] of Probability*Amount ($100*.5 = $50), demonstrating people's risk aversion and how the subjective value of a risky outcome is different from the *expected* value.

Methods of Experimentally Computing Subjective Value

Past research on discounting in both behavioral economics and cognitive psychology have produced various methods of determining the Subjective Value that participants assign to the offered delayed/uncertain outcome (see, e.g., Frederick et al., 2002 Table 1 pp. 378-380). The goal of all the procedures is to identify a subjective value point, and a common method to do so is to ask a series of binary, forced-choice questions and to determine when a participant's choice changed (e.g., from the immediate option to the delayed option).

For example, in a delay discounting choice context, the *adjusting-delay* procedure systematically titrates, or changes, the delay [$100 in one week (adjusted to one month) versus $20 now] based on participant responses, whereas the *adjusting-immediate-amount* procedure systematically titrates the immediate commodity amount [$100 in one month versus $20 now (adjusted to $18 now)]. Although these procedures produce similar patterns of results (i.e., participants discounted delayed gains), Holt et al. (2012)

[4] Expected value is based on the rational-choice model in economics (Frederick et al., 2002, p. 373).

found that the adjusting-immediate-amount procedures produce more consistent estimates of discounting, and unlike adjusting-delay procedures did not show order effects.

Additionally, titration procedures attempt to more efficiently determine the Subjective Value that people assign to the offered outcome by adjusting the next choice based on a participant's previous choice. For example, classic adjusting-immediate-amount procedures might vary the "$X now" up or down within a specified range, say from $0 to $100 at increments of $5 or $10. Then, based on where the participant "flipped" from choosing the immediate (or delayed) option to the delayed (or immediate) option, the Subjective Value is computed. Say that a participant, starting at $100 in 1 month vs. $0 now chose the delayed option, and stuck with the delayed option until confronted with $100 in 1 month vs. $20 now, then they chose the immediate option and stuck with that choice until the end of the block (i.e., when the immediate option was $100 now). The Subjective Value would be calculated as the average of the two options demarcating the "flip" (Rachlin et al., 1991). So if at $10 the participant chose the delayed option but at $20 the participant chose the immediate option, then that participant's Subjective Value would be $15 (i.e., ($20 + $10)/2). Although this is a reliable way to measure Subjective Value, it is time consuming, and arguably unnecessarily time-consuming given that all of the choices the participant made after the $20 trial were essentially disregarded. Because of this inefficiency, the *titration procedures* emerged (e.g., Du et al., 2002) to proceed to the next block (e.g., a different delay than 1 month in delay discounting studies or a different probability in probability discounting studies) once a participant "flips" choices, termed *indifference points* or *points of equivalence* (Rachlin et al., 1991).

In addition to these adjusting- and titration procedures, sometimes Subjective Value is measured with a single, direct question, asking how much the participant would be willing to accept [or pay] now to forego the delayed or uncertain gain [or loss] offered (see, e.g., Lowenstein, 1987). To the best of this author's knowledge, single-item measurement of Subjective Value has not been directly compared to the other methods.

Dual Discounting

A recent methodological development in discounting scholarship has been to combine delay and probability features in the choice context (e.g., 50% chance of $100 in 1 month vs. 100% chance of $20 now; Vanderveldt et al., 2015; Cox & Dallery, 2016) termed "dual discounting" (Clatch & Borgida, 2021). This has increased generalizability of studying discounting, because many life decisions vary on both features delay and probability, and it has enabled researchers to directly compare the magnitude of delay versus probability discounting and to detect multiplicative (i.e., interactive) effects of delay and probability on decision making. However, likely due to its complexity, to the best of this author's knowledge, only three articles have used the experimental dual discounting paradigm (Vanderveldt et al., 2015; Cox & Dallery, 2016; Clatch & Borgida, 2021). Vanderveldt et al. (2015) and Cox and Dallery (2016) studied monetary commodities, with the latter replicating the former's findings for monetary gains and extending them to monetary losses.

Clatch and Borgida (2021) applied the experimental dual-discounting paradigm to plea-bargain decisions, a non-monetary loss. Study 1 showed that realistic criminal sanctions (i.e., criminal charge-sentence combinations such as "a felony associated with 60 days in prison and 1 year probation"), which at best are ordinal, could be rank-

ordered. The rank-ordering—that is, knowing which criminal sanction is harsher than which other criminal sanctions—is a pre-requisite for the immediate-amount-adjusting titration procedure used by Vanderveldt et al. (2015) and Cox and Dallery (2016) because this procedure presents a harsher or more lenient criminal sanction based on the participant's response to the previous criminal sanction.

Whereas everyone knows that $12 is more than $10, it is less clear that there would be consensus about whether "a felony associated with 30 days in prison and 1 year probation" is harsher than "a gross misdemeanor associated with 60 days in prison and 1 year probation." After Study 1 showed that realistic criminal sanctions could be rank-ordered, Study 2 utilized the criminal sanctions that were most clearly distinguishable from each other and rank-ordered. In Study 2, we experimentally tested whether probability (operationalized as Probability of Trial Conviction) and delay (operationalized as Delay until Trial) influenced decision making in the same way as expected with monetary outcomes. The short answer is that Probability influenced plea-bargain decisions in much the same way as monetary decisions, but that Delay did not (neither as a main effect nor in interaction with Probability). Specifically, as Probability of Trial Conviction increased, participants were more likely to accept more plea bargains, but Delay had a nonsignificant effect on decisions. This result could be because, as noted by Harris (2012), non-monetary losses may be categorically different from monetary commodities (losses and gains) because they evoke more apprehension. Study 3 addressed two key alternative explanations, finding that they did not explain Study 2's findings: (1) Study 2's ordinality of the criminal sanction commodity and (2) the relatively narrow range of Delay values used in Study 2. Additionally, Study 3 tested a

new manipulation, Waiting-for-Trial-Location (Bail vs. Jail vs. Ambiguous, the latter of which was used in Study 2) as a manifestation of the apprehension hypothesis (i.e., greater apprehension when in jail than when out on bail). As expected, Delay influenced plea-bargain decisions of participants in the Jail condition, unlike the other two conditions; however, the direction of the effect was the *reverse* of what was expected based on the literature on monetary gains and losses. In plea-bargain decisions, people were averse to trial when it was associated with longer Delays, evidenced by accepting harsher pleas (i.e., having higher Subjective Trial Aversion); whereas with monetary losses and gains, as Delay increased Subjective Trial Aversion *de*creased.

In sum, the work by Clatch and Borgida (2021) shows that the dual discounting paradigm can be applied to the plea-bargaining setting. This work also shows that in non-monetary-loss contexts, like monetary-gain contexts, people prefer certainty, but in non-monetary-loss contexts, *unlike* monetary-gain contexts, people do not always prefer immediacy. At least in the plea-bargain context, the preference for immediacy depends on whether the decision-maker is waiting for trial in jail or is out on bail.

The next section first explains the centrality of plea-bargain decisions to the functioning of the criminal justice system. Then, the case is made for how plea bargaining represents a conceptually appropriate decision-context in which to study dual discounting effects.

Plea Bargaining: Dual Discounting in an Intangible, Non-Monetary Loss Context

"Plea bargaining is a defining, if not *the* defining, feature of the present federal criminal justice system" (Brown & Bunnell, 2006). In 2003, the Bureau of Justice Statistics reported 75,573 federal criminal cases, of which approximately 95% were

disposed of by a guilty plea, or plea bargain (Devers, 2011). These high plea-bargain rates in federal cases are not qualitatively different from those in state cases (Rosenmerkel et al., 2010).

Criminal sanctions often involve the loss of liberty and are the harshest sanctions society uses to deter and punish behavior. Because of the severity of the sanction, William Blackstone coined the well-known maxim: "[I]t is better that ten guilty persons escape, than one innocent suffer" (1826, p. 358). Although the real-world ratio of escaped guilty persons and wrongly convicted innocents is a known unknown, there is evidence that innocents are wrongly convicted through their own decision to accept a plea bargain: 38 of the Innocence Project's 351 people exonerated by DNA evidence accepted a plea bargain (Innocence Project, 2017). The prevalence and centrality of plea bargaining in the criminal justice system and the documented reality that innocent defendants accept plea bargains, provokes two broad and significant questions: (1) to what extent do defendants' innocence/guilt influence their plea-bargain decision? And (2) what factors other than factual innocence/guilt influence their plea-bargain decisions? A new literature on plea bargaining, though not implicating the psychology of discounting, has revealed some initial answers to these questions by measuring plea-bargain decision-making as a single binary choice: accept X plea bargain or go to trial and face Y criminal sanction.

First, studies involving methods including hypothetical scenarios (Edkins & Dervan, 2018; Helm, 2017; Helm et al., 2018; Helm & Reyna, 2017; Henderson & Levett, 2018; Quickel & Zimmerman, 2019; Redlich & Shteynberg, 2016; Tor et al., 2010) as well as impact studies (Gregory et al., 1978) have consistently shown that guilty participants accept plea bargains significantly more than do innocent participants.

Second, the person variables of gender (Zimmerman & Hunter, 2018), age (Helm et al., 2018), and risk-taking tendencies (Garnier-Dykstra & Wilson, 2019) significantly influence plea-bargain decisions. Additionally, situational variables including the trial sentence's severity (Helm, 2017[5]; Redlich & Shteynberg, 2016[6]; Schneider, 2018[7]; Zimmerman & Hunter, 2018[8]), probability of trial conviction (Helm, 2017; Helm & Reyna, 2017; Zimmerman & Hunter, 2018), charge severity (Helm, 2017[9]; Helm & Reyna, 2017), framing of the plea bargain (Garnier-Dykstra & Wilson, 2019[10]), and pretrial detention (Edkins & Dervan, 2018) all influence binary plea-bargain decisions.

To date, only Clatch and Borgida (2021) take advantage of dual discounting to examine plea bargaining. Utilizing dual discounting affords various advantages, including (1) providing a continuous dependent measure, which has wider variability than a binary measure and offers greater potential for person variables to explain a significant portion of the variance, (2) providing a *series* of binary plea-bargain decisions, which produces richer insight into the process of situational coercion/influence in the structure of the plea-bargain decision context, to answer the question "at what point would this same person switch his/her decision from plea to trial or vice versa," (3) providing a paradigm to assess the influence of trial's delay on plea-bargain decisions, and (4) the potential interaction of Delay until Trial and Probability of Trial Conviction interaction.

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[5] Manipulated as same versus more severe trial sentence than plea option.
[6] Manipulated as jail versus no-jail.
[7] Manipulated using various percentages of trial sentence to determine the "plea discount."
[8] Manipulated as a mandatory minimum trial sentence of 10 years versus judicial discretion of 4–6 years.
[9] Manipulating same charge of misdemeanor versus more severe trial charge of a felony.
[10] Manipulated as a gain, loss, or neutral.

The person-by-situation ("P x S") approach of social psychology (see next section) can be leveraged in conjunction with dual discounting to address a richer catalogue of factors that may influence plea-bargain decisions and provide a deeper understanding of the plea-bargaining decision process. In plea bargaining, the criminal defendant is offered a binary preference task: Plead guilty now to crime X and receive sentence A with 100% certainty *or* go to trial eventually and face crime Y associated with sentence B with a chance, C, of losing.[11] Thus, plea-bargain decisions contain the feature of delay—plea bargain now or go to trial later—and they also contain the feature of probability—sign the plea agreement that the two attorneys have already agreed on, making it relatively certain, or go to trial, which is associated with a particular degree of uncertainty. The criminal sentence is the commodity in plea-bargain decisions.

Although scholars have recognized the possibility of studying plea bargaining using a discounting framework (see e.g., Bibas, 2004; Wilford et al., 2019), most do not specifically point to dual discounting (but see Clatch, 2017; Clatch & Borgida, 2021). Additionally, empirical legal scholars have extolled the utility of empirical discounting studies and acknowledged that the actual empirical work is "notoriously difficult" to conduct (Jolls et al., 1998). Other legal scholars have noted the potential to test whether "probabilities of acquittal" (Easterbrook, 1983; Easterbrook, 2013, p. 553) and "time discounting" (Bibas, 2004; see also Covey, 2007) theoretically could influence plea-bargain decisions, and the structure of plea bargains offers a new and engaging context to do so. Studying discounting in plea bargaining enables conclusions about discounting in a

[11] Note that X may be the same as Y, but often Y is harsher; and this practice is called charge bargaining (Piehl & Bushway, 2007). Also, as can be expected, harsher criminal charges are associated with harsher sentences (A and B).

non-monetary loss context but also has implications for the most common method of resolving cases in the criminal justice system.

Person and Situation Variables: The Present Plea-Bargaining Project

The present work intends to leverage the P x S approach from personality and social psychology to study discounting in plea bargaining. Broadly, researchers have studied personality and social behavior using three distinct research strategies: the dispositional strategy, the interactional strategy, and the situational strategy (Snyder & Ickes, 1985; Snyder & Cantor, 1998). Researchers using the dispositional strategy assume that social behavior can be meaningfully understood based on relatively stable characteristics, such as dispositions and motives, residing within individuals. The interactional strategy assumes that models of social behavior can be meaningfully improved by utilizing moderator variables, and one manifestation of the interactional strategy is the use of situational moderating variables to understand the relations between person variables and an outcome (Snyder & Ickes, 1985, p. 897). The situational strategy not only seeks to understand social behavior through the study of situational cues but also how those situational cues themselves arise (e.g., are they hard-and-fast features of the environment like darkness during the night or are they socially constructed by individuals and their social interactions like the possibility of playing competitive games).

This dissertation research adopts the spirit of the interactional strategy,[12] assuming that, as noted in a previous section, delay and probability are situational

[12] Rather than already heaving a clear picture of which personal variables influence plea bargaining and asking which situational features moderate the influence of those person variables on plea bargaining, and because dual discounting provides situational cues as the first step, I ask which personal features moderate or change the influence of the

features of many decisional contexts, including plea-bargain decisions. As the current plea-bargaining system exists, probability and delay are naturally-occurring situational cues. Factual innocence, however, is a situational variable that may depend more on individual perceptions and beliefs than the present plea-bargaining literature recognizes. As noted by Snyder and Ickes (1985), the experimental manipulation of key situational variables allows for internal validity but has the side effect of constraining individual behavior, limiting our view of the phenomenon of study. Although the factual innocence (and guilt) of certain crimes, such as possession of a controlled substance, may be easy to categorize into experimental factors without constraining the phenomenon, other crimes, like those involving negligence (i.e., unreasonable behavior) are more likely to be constrained by such experimental categorization. For example, experimentally bucketing behavior into extreme and obvious negligence relative to obviously reasonable, non-negligent, behavior leaves the study devoid of the shades of gray that are arguably much more often present in the world. Moreover, when the crime itself has wider variance in both appropriate behavior (e.g., reasonable/non-negligent behavior) and behavior deemed criminal (i.e., negligent behavior can take a lot of forms), the individual defendant's perception of their own innocence is given a larger foothold. Specifically, if it is ambiguous whether one's behavior is in fact negligent, individual perceptions of innocence and blameworthiness may be more important to decision-making than the factorized situational cue of Factual Innocence. Thus, in addition to categorically parsing and manipulating Factual Innocence, the present work also measures individuals' degree

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situational features. Statistically, this results in the same test (an interaction), but my focus is on discovering the person variables relevant to plea bargaining and the situational features in that setting.

of self-blame and *perceptions* of innocence to recapture the variance lost in the experimental manipulation of the situational cue of Factual innocence.

Although situational cues may directly influence decisions, of particular interest to researchers adopting the situational-moderators version of the interactional strategy is the interaction between person and situation variables. To date the discounting literature has not systematically tested the extent to which person variables may be a lens through which situational features (such as probability and delay) are viewed. Rather, research on discounting has only begun to scratch the surface by measuring person variables and testing their direct effects on decisions. For example, Myerson et al. (2017) compared participants' decision-making in delay discounting of losses and gains, and in making decisions about monetary losses, people who were less impulsive (Eysenck, 1985; Ainslie, 1975 for a theoretical account) showed a very different pattern of responses compared to more impulsive others. Specifically, most participants preferred to lose money later, and this preference increased as delay was increased; whereas low-impulsive participants were debt averse and actually preferred to pay off their debt immediately rather than later. Additionally, Molouki et al. (2019) showed that future (i.e., delayed) negative events were associated with strong negative contemplative (i.e., anticipatory) emotions, and as those strong negative emotions increased, people became more likely to prefer the immediate negative outcome over the delayed negative outcome. Furthermore, criminal experience and gender seem to influence plea-bargain decisions directly, though their explanatory power was washed out by the experimental factors of probability and delay (Clatch & Borgida, Study 2, 2021).

Moreover, the work that does test the interaction of person and situational variables has focused only on the situational feature of delay. Green et al. (1999) found age differences—that is person differences on the basis of age—in delay discounting of monetary rewards, and Lempert et al. (2012) found that trait-level perceptions of stress (measured using the Cohen et al., 1983, Perception of Stress Scale) predicted delay discounting of monetary rewards. No work to date has evaluated person-level variables in a *dual* discounting framework. Doing so not only adds the possibility to test how person-level variables alone influence probability discounting (e.g., perception of risk), which has to date been neglected, but also the possibility to test the *comparative* impact of person variables on the key situation variables (Probability and Delay). This latter possibility suggests that person-variable lenses may differentially affect situational cues—for example perception of risk, rather than perception of delay, may be particularly susceptible to change depending on person-variable lenses.

Furthermore, a more complete approach to studying plea-bargaining behavior would allow for the interactive effect of person and situation variables. For example, highly impulsive individuals may view the features of delay and probability differently than will less impulsive individuals. Highly impulsive individuals may have greater tolerance for risk of losing at trial but less tolerance for delayed outcomes than will less impulsive individuals. Additionally, research at the intersection of psychology and law has described a "phenomenology of innocence" that counterintuitively, and tragically, often leads to false confessions because the innocent person thinks everything will work out and the truth will become apparent to everyone (see, e.g., Kassin, 2008). Analogously, factual innocence in plea bargaining, may interact tragically with system

justification (Kay & Jost, 2003) to encourage beliefs of self-blame and worthiness of *some* jail time via a plea: A healthy, functioning criminal justice system would not convict a perfectly innocent person, but because they are being confronted with criminal charges, they must be worthy of some degree of blame.

The present studies examine plea bargaining from a more integrated social-psychological perspective—emphasizing person variables (including but not limited to impulsivity, negative contemplative emotions, beliefs about blameworthiness, and criminal experience), situation variables (including but not limited to delay until trial, probability of trial conviction, attorney advice, factual innocence/guilt, and waiting-for-trial location), and their (P x S) interaction. My past research on plea bargaining (Clatch & Borgida, 2021) has detailed the relation between situation variables (Delay until Trial, Probability of Trial Conviction, and Waiting-for-Trial Location) on plea-bargain decision-making. Here, *Study 1* will analyze a dataset (Clatch & Borgida, 2021, Study 3) to examine the relation between key person variables and plea-bargain decisions. *Study 2* is an important methodological study with two purposes: (1) to determine whether previous findings replicate across various forms of outcome variable measurement and study design and (2) to determine whether there are methodological tweaks that can be built into the dual discounting paradigm used previously to make data collection as reliable, valid, and efficient as possible. *Study 3* examines the impact of a fourth situational variable: factual innocence versus guilt. *Study 4* adds a fifth, more ecologically valid situation variable: attorney advice. *Studies 2*, *3*, and *4* will all continue to measure the person variables found to be impactful in Study 1 in order to further test P x S interactions.

Chapter 2: Study 1 – Person-Variable Predictors of Plea-Bargain Decision-Making

The goal of this study is to assess whether person variables predict plea-bargain decision-making and qualify patterns of discounting, producing two broad research questions: (1) Under what circumstances do person variables interact with situational variables to influence plea-bargain decisions? and (2) In particular, do person variables influence people's perceptions of probability and delay in a discounting task? These questions have not been tested to date and have the potential to contribute to both the psychology-and-law literature on plea bargaining as well as discounting scholarship. During the peer-review process of Clatch & Borgida (2021), we had to conduct a third study to further explain Study 2's findings, which were summarized in the previous chapter. We expected that Study 3's new experimental manipulation, Waiting-for-Trial Location, would explain the Study 2's null delay findings (contrary to monetary discounting findings), but we also collected various person variables for future analyses. The purpose of Study 1 of my dissertation is to utilize the rich collection of unanalyzed person variables to determine whether there are individual differences that contribute to our understanding of the discounting of non-monetary losses as well as of plea-bargain decision-making. Including person variables in models of plea-bargain decision-making as both main effects and interaction terms with situational variables offers a more comprehensive psychological explanation of the plea-bargain decision-making process. Additionally, this dissertation research takes advantage of hierarchical modeling methods to test the comparative impact of the person, situated-person, and situation variables on plea-bargain decision-making.

The individual-difference measures include traditional person variables such as personality traits including impulsivity (Eysenck et al., 1985) and need for cognitive closure (Webster & Kruglanski, 1994). The measures also include situated-person variables, which are person-specific reactions to the plea-bargaining situation including contemplative emotions, perceptions of innocence, and perceptions of blameworthiness.

Trait-Level Individual-Differences

The trait-level individual differences that may influence plea-bargain decision-making include need for cognitive closure, system justification, and impulsivity. Webster and Kruglanski (1994) suggest that for people with high Need for Cognitive Closure (NFCC), decision making involves two main processes: *seizing* on information that is easy to process and *freezing*, or not changing one's mind after forming an opinion. The process of seizing and/or freezing is relevant to the present study because participants make a series of plea-bargain decisions. These decisions are not particularly easy to process because they involve fluctuating plea-bargain criminal sentence offers, fluctuating delays until trial, and fluctuating probabilities of trial conviction. Individuals higher in Need for Cognitive Closure, rather than tracking the fluctuations of the various situational features, may simply anchor on their first plea bargain decision (plea vs. trial) and thus be influenced more by their first decision than by other situational cues like probability and delay. Accordingly, the following was hypothesized:

Hypothesis 1a (H1a). *Participants with higher NFCC scores will seize-and-freeze, evincing "stickiness" of their first plea-trial choice (i.e., choose all "trial" or all "plea") than will participants with lower NFCC scores.*

H1b. *Participants with higher NFCC scores will seize-and-freeze across the Delays, evincing smaller variation in plea decisions across the Delays.*

Kay and Jost's (2003) System Justification Scale measures the extent to which a person justifies social and political systems and policies. Individuals high in System Justification tend to comply with a system and its supporting ideologies rather than question the system. In the context of plea bargaining, it could be argued, on the one hand, that the criminal justice system stands on the criminal defendant's Constitutional right to a trial of their peers, suggesting that individuals high in System Justification may be more likely to choose to go to trial because they have faith that the Constitutionally-protected system is fair. On the other hand, plea bargains are by far the more common means of resolution of cases in the criminal justice system, and the plea bargain process starts with prosecutors (key criminal justice system actors) offering a plea deal, suggesting that individuals high in System Justification may be more likely to accept a plea deal than to choose to go to trial, as such a choice is seen as a standard feature of the "system." No past work has assessed either possibility, but I suspect the former is most likely because I think that the abundance of criminal law movies and TV shows depicting criminal trials (as opposed to pleas) has inflated the public perception that trial is the "typical" or "right" way for a criminal case to be resolved. Accordingly, the following was hypothesized:

H1c. *Individuals with high system justification will be more likely to choose to go to trial than will individuals with low system justification.*

Additionally, because there are two criminal processes associated with the criminal justice system (i.e., trial and plea) it is hypothesized that participants' beliefs

about their own innocence/guilt will influence whether they choose trial/plea more when they have faith in the criminal justice system. Accordingly, the following was hypothesized:

H1d. *Participants' system justification will interact with their perceptions of Innocence to predict their plea decisions, such that participants with high system justification who also believe they are innocent will evince the most willingness to go to trial, and participants with high system justification who also believe they are guilty will evince the most willingness to accept a guilty plea.*

Impulsivity is common among many criminal defendants (see Gottfredson & Hirschi, 1990), and Redlich et al. (2017) have conceptually linked it to plea-bargain decisions, arguing that defendants may focus on the short-term benefits that plea bargains provide, such as a reduced sentence, and undervalue the long-term consequences like waiving their trial rights. Although this is a possibility, research on impulsivity also suggests a relation between impulsivity and a propensity for risk-taking (Upton et al., 2011). Because the plea bargain option is relatively certain and trial is associated with probabilistic risk, the following was hypothesized:

H1e. *Highly impulsive participants will prefer the uncertain/risky option, trial, over the certain plea bargain option, relative to less impulsive participants.*

Relatedly, if impulsivity makes people more likely to take risks, it may also make them more sensitive to cues of probabilistic uncertainty and chance. Accordingly, the following was hypothesized:

H1f. *Participants' impulsivity will interact with probability of trial conviction, such that highly impulsive participants will be especially sensitive to probability, whereas less impulsive participants will be less sensitive to probability of trial conviction.*

Impulsivity is the personality feature most often mentioned in the discounting literature, especially to explain delay discounting (see, e.g., McKerchar & & Renda, 2012; Steward et al., 2017). Myerson et al. (2017) found that individuals' impulsiveness (but not Venturesomeness and Empathy, which are the broader personality scale's two other subscales) was related to their delay discounting decisions. In particular, when Myerson et al., like Harris (2012), noticed that a substantial proportion of their sample actually preferred to pay a fine immediately rather than delay it, they termed the pattern "reverse discounting", and called this group of participants debt averse. This debt-averse group had below-average Impulsiveness. Accordingly, the following was hypothesized:

H1g. *Participants' impulsivity will interact with delay until trial, such that low-impulsivity participants will be especially sensitive to the trial's delay, whereas more impulsive participants will be less sensitive to the delay until trial.*

Situated-Person Reactions

As mentioned in the previous chapter, the interactional strategy of studying social behavior has helped researchers identify a downside of experimentally manipulating situations: Operationalizations of key variables into categorical experimental conditions artificially constrains participant intra-study reactions and behaviors. In the present study, having participants read a scenario in which they drove down a residential road and hit a child, resulting in a criminal charge of the participant, is relatively open to interpretation, allowing participants to react in various ways. Participants may feel varying degrees of

self-blame, perceive themselves to be more or less innocent or guilty of the crime charged, and may have mixed (i.e., positive and negative) feelings about waiting for trial. Because these are beliefs and perceptions that are relatively individualized, and personal, to each participant, these beliefs and perceptions are akin to person variables, but they are very context-dependent. Specifically, they are study-dependent such that they are responses to the hypothetical scenario and the legal decision-making task with which the study confronts them. For these reasons I term them "situated-person" reactions.[13]

Based on questions and comments at conferences and past presentations as well as an informal qualitative assessment of participant responses to open-ended questions in a past study (Clatch & Borgida, 2021, Study 2), people seem to differ in their perceptions of innocence based on the scenario, their degree of self-blame for the events in the scenario, and how strongly those beliefs influenced their plea-bargain decisions. Accordingly, it was hypothesized:

H1h. *Participants experiencing more self-blame for the accident and child's injury will accept more guilty pleas than will participants experiencing less self-blame.*

H1i. *Participants who perceive themselves to be less innocent of the crime charged will accepted more guilty pleas than will participants who perceive themselves to be more innocent.*

Again, based on anecdotal evidence, including that Clatch and Borgida's Study 2 open-ended participant responses mentioned events from the driving scenario like

[13] These subjective, situation-specific assessments can also be understood as construals of the crime scenario. Situational construal has had a long and rich history in social psychology (see, e.g., Fazio, 1990; Griffin & Ross, 1991; Ross & Nisbett, 199l; Thomas & Znaniecki, 1918).

whether they used their hands to type the text before the accident, I suspect that blameworthiness and perceptions of innocence develop during and immediately after participants read the hypothetical scenario rather than in direct response to the probability manipulation. The probability manipulation might suggest a degree of blameworthiness and guilt for participants in the high-likelihood-of-conviction conditions, but I believe that perceptions of blame and innocence have somewhat crystallized in participants by time they arrive at making their plea-bargain decisions. Accordingly, the following was hypothesized:

H1j and 1k. *Neither participants' self-blame nor their perceptions of innocence will interact with probability of trial conviction to predict plea bargain decisions.* That is, blameworthiness and innocence are more accurately described as individual perceptions and beliefs developed after reading the scenario rather than influenced by the situational cue of probability of losing at trial.

In addition to self-blame and perceptions of innocence, various anticipatory emotions may also predict plea-bargain decision-making. Harris (2012) found that people experience feelings of dread, also termed "anticipal unpleasure" (Lowenstein 1987), before negative events and those feelings increase as the event grows closer. Additionally, Lowenstein's anticipatory utility model (1987) emphasizes how people's psychological reactions to events often influence their economic decisions. The anticipatory utility model was designed to qualify the traditional economic model of expected utility by highlighting individual differences in "people's abilities to imagine the future," thus squarely situating the anticipatory utility model in the behavioral

economics of decision-making involving delayed outcomes (Frederick et al., 2002, p. 354). Accordingly, the following was hypothesized:

H1l. *Participants with stronger negative anticipatory emotions about the delayed option (i.e., trial) will accept more pleas than will participants with weaker negative anticipatory emotions.*

Furthermore, without formally testing it, Clatch and Borgida's Study 3 (2021) argued that waiting for trial in jail would increase negative emotions regarding trial, making the longer delays until trial less appealing relative to waiting for trial while out on bail. Accordingly, in the present study the following was hypothesized:

H1m. *Negative anticipatory emotions will moderate the relation between Waiting-for-Trial Location and plea-bargain decisions*. Specifically, participants in the jail condition should exhibit the stronger negative anticipatory emotions and accept the most pleas because jail should make the wait until trial especially negative to contemplate relative to considering the wait until trial while living one's life as usual (i.e., participants are out on bail).

Similarly, for participants in the jail condition, the delay preceding trial is more costly for them relative to participants in the bail condition, so being in jail may make them especially sensitive to how long they must experience the negative emotions of apprehension/anticipation of trial. Clatch and Borgida (Study 2 versus Study 3; 2021) showed that the situational factor of being in jail made Delay until Trial a significant deterrent for the trial option. Accordingly, the following was hypothesized:

H1n. *In the jail condition, negative anticipatory emotions will moderate the relation between Delay until Trial and plea bargain decisions.* Specifically, for

participants in the jail condition, their negative anticipatory emotions about trial should determine the strength of the relation between Delays and their plea-bargain decisions because waiting in jail and having negative emotions sensitizes participants to the delay spent waiting for trial.

Criminal Experience

Experience in the criminal justice system is a life experience that may be relevant to people's subsequent plea-bargaining decisions. A previous study (Clatch & Borgida, Study 1, 2021) revealed that based on criminal justice system experience, people perceive criminal charges and sentences differently. Based on informal discussions with criminal-law attorneys throughout my law school experience, their hunch, based on their work experience, was that experienced criminal defendants are much more likely to insist on going to trial. The purported reason for this is that experienced criminal defendants are more savvy about how much work the prosecutors have to do to convict them beyond a reasonable doubt. Accordingly, the following was hypothesized:

H1o. *Participants with Criminal Experience will choose the trial option more than their inexperienced counterparts*.

Method

Because Study 1 analyzes both experimental and non-experimental predictors of plea-bargain decisions, the experimental method of Clatch and Borgida's Study 3 (2021) is recounted below with additional details regarding the non-experimental measures.

Participants

MTurk participants received $1 for their participation. After removing 63 participants suspected of VPN-use to hide their lack of presence in the United States,[14] there were 524 MTurk participants. A shirker analysis (Berinsky et al., 2013) was conducted and 126 participants were excluded,[15] leaving a total of 398 participants. SM 2 shows scenario and attention check questions as well as the shirker analyses (Berinsky et al., 2013) based on those questions. The final dataset (N = 398) consists of 57.0% self-identifying Hispanic-White participants (n = 227), 19.6 % (n = 78) Non-Hispanic-White participants, 11.3% (n = 45) Black participants, 6.0 % (n = 23) Asian participants, and the remaining 6.3% (n = 25) as not-specified, multi-racial, other, Native Hawaiian, or American Native. The mean age of participants was 36.62 (SD = 11.10). The final sample consisted of 44.7 % (n = 178) females, 51.5 % (n = 205) males, and 3.8% (n = 15) participants did not specify their gender or selected other.

Procedure

The survey contained a vignette describing an unfortunate hypothetical situation (see SM 3) in which the participant is asked to imagine driving down a residential road and while texting using voice activation, when they[16] hit and injure a child. Participants then are instructed that they are being (hypothetically) charged with a criminal offense,

[14] Participants who named eggplants "brinjal" were deemed to be from East Asia and excluded. See SM 1.

[15] As discussed in Clatch and Borgida's SM 12 (2021), a variety of exclusion criteria were used to increase the chances that the final sample included participants who were reasonably attentive and residing in the United States. For example, sixty-three participants who identified a photo of eggplants as "brinjal" were excluded, and participants who got two specific reading comprehension questions (one about the name of the criminal charge in the hypothetical scenario and one about the central occurrence in the hypothetical scenario—that a child got hit by a car) incorrect were excluded.

[16] Singular "they" is used to be gender neutral.

and they answer a variety of binary, forced-choice questions in which they had to decide whether to accept a plea bargain or to go to trial. Last, participants completed a number of individual difference measures (e.g., an impulsivity scale), open-ended questions (e.g., why do most people accept pleas?), and demographic questions (e.g., gender).

Design

This study had a 4 (Probability of Trial Conviction) x 3 (Waiting-for-Trial Location) x 5 (Delay until Trial) mixed-factor design with two between-participant variables: Probability of Trial Conviction with four levels (5%, 50%, 95%, 99%) and Waiting-for-Trial Location with three levels (Jail, Bail, Ambiguous). Probability of Trial Conviction is the likelihood that participants will lose at trial. The scenario in the "Ambiguous" condition was left ambiguous as to where participants waited for trial. The Jail and Bail conditions contained explicit language in the vignette describing where participants were waiting. The one within-participants factor was Delay until Trial, the length of time that participants are told they would have to wait until their trial date, which had five levels (1 day, 1 week, 1 month, 6 months, 1 year). Probability of Trial Conviction and Waiting-for-Trial Location were fully crossed, and participants were randomly assigned to one of the 12 conditions. Each participant saw all five levels of Delay until Trial, and all five levels were presented in random order to reduce the chance of order effects.

The sole outcome variable in this study was *Subjective Trial Aversion*, which is analogous to the subjective value of the trial option outcome, measured as the indifference or tipping point of each participant within each decision tree (one per condition). The Subjective Trial Aversion scores are shown at each tipping point in the

figure shown in the SM 4, since this study used a titrated adjusting-immediate-amount procedure to measure Subjective Trial Aversion.[17]

Materials and Measures

The data was originally collected by Clatch and Borgida (Study 3, 2021) but were not analyzed. The study materials consisted of an online survey, which contained attention checks (SM 2), data quality checks (SM 1 & 2), a vignette/scenario (SM 3), legal decision-making questions (see SM 4 for the higher-order structure of the legal decision-making questions and SM 5 for a single question example), and individual difference measures. The situated-person measures, including perceptions of blameworthiness, negative contemplative emotions questions (adapted from Molouki et al., 2019), an open-ended question, and a categorical perception of innocence question were presented in random order after the series of binary, forced-choice plea bargain questions. All of the situated-person measures are presented in SM 6. Then, the more trait-level individual-difference measures of Need for Cognitive Closure (Webster & Kruglanski, 1994), System Justification Scale (adapted from Kay & Jost, 2003), and Impulsivity (Eysenck et al., 1985) were presented in random order before the driving experience, criminal experience, and demographic questions. The trait-level individual-difference measures are all presented in SM 7, and the experience and demographic questions are all presented in SM 8.

The remaining specifics of this Materials and Measures section will be organized into a group of trait-level predictors, a group of situated-person predictors, and

[17] See Chapter 1's section named "Methods of Experimentally Computing Subjective Value" for full details.

demographic and experience predictors, but the sole dependent variable in this study is described first.

Subjective Trial Aversion

The term "subjective value" is most useful when describing participants' decisions about positive things like receipt of money because an increase in money is easily understood as being of value. However, in a loss context, the valence of the outcome variable needs to be reversed too. Thus, this dissertation uses the variable name "Subjective Trial Aversion" to describe the outcome variable of this plea-bargain discounting study.

Based on a series of four choices between plea bargains and trial (within a Delay-specific decision tree), participants' Subjective Trial Aversion was obtained for each Delay block. Because this study used the adjusting-immediate-amount procedure, the plea option's jail amount increased when participants chose the plea (to incentivize "flipping" to trial). Accordingly, the Subjective Trial Aversion score is calculated by taking the average of the two closest plea-jail options in which the participant made *different* choices (e.g., trial then plea). For example, if the sequence of decisions across the four choices is Plea-Trial-Plea-Plea, then the Subjective Trial Aversion score for that decision tree would be 73 because the plea rejected by the participant (i.e., they chose trial) was 75 days and the highest plea accepted by the participant was 71. So the average of 75 and 71 is 73 (see SM 4 for the path to each Subjective Trial Aversion score). Note that a higher Subjective Trial Aversion score means that a person is more willing to accept the plea bargain (i.e., lose certain and immediate freedom) in order to avoid the uncertain and delayed trial, and its trial criminal sentence.

Trait-Level Predictors

The predictors in this section include need for cognitive closure, impulsivity, and system justification.

Need for Cognitive Closure. Webster and Kruglanski (1994) suggest that for people with high Need for Cognitive Closure, decision making involves two main processes: seizing on information that is easy to process and freezing, or not changing one's mind after forming an opinion. The present study used the shortened, 15-item version created by Roets and Van Hiel (2011), which contains three items from the five original factors: (1) desire for order and structure, (2) discomfort with ambiguity, (3) decisiveness, (4) desire for predictability about the future, and (5) close-mindedness. The Cronbach alpha associated with this sample's Need for Cognitive Closure data is .89.

Adapted System Justification Scale. Kay and Jost (2003) present the System Justification scale, which I adapted by modifying the questions' referent so that they ask specifically about the criminal justice system (rather than society, policies, or the political system, broadly) and by adding three new items that specifically ask about plea bargain or trial options. For example, the item "In general, you find society to be fair" was changed to 'In general, I find the criminal justice system to be fair,' and the item 'In general, the American political system operates as it should' to 'In general, the criminal justice system operates as it should.' Additionally, the following three new items were added: "In America, a criminal defendant's right to a criminal trial serves to protect the innocent"; "In America, the plea-bargaining system problematically pressures innocent criminal defendants to plead guilty"; "In America, a criminal defendant's ability to make a deal (i.e., a guilty plea deal) with the prosecution is usually for the defendant's benefit."

All of the changes are summarized in the SM 7. The full adapted scale with the three new items had a Cronbach's alpha of .65, and the adapted scale *without* the three new items had an alpha of .51. Feygina et al. (2010) report reliabilities of .80, .81, and .77 across Studies 1 through 3 respectively for the original (Kay & Jost, 2003) system justification scale. However, Clatch and Borgida (2021; Study 2) reported a reliability of .67 for the original scale. Furthermore, the two adapted versions were significantly and positively correlated [$r(40) = .77$, $p < .001$]. Accordingly, the full adapted scale was used in the present study.

Impulsivity. The I-7 is a 54-item personality questionnaire (Eysenck et al., 1985) that assesses self-reported Impulsiveness, Venturesomeness, and Empathy. Myerson and colleagues (2017) found that varying levels of sub-scale-level Impulsiveness was related to participants' discounting decisions (but not Venturesomeness and Empathy). Accordingly, the present study used the 19 items from the Impulsivity subscale (SM 7). This sample's Cronbach alpha is .88.

Situated-Person Predictors

The predictors in this section include perceptions of blameworthiness, a categorical assessment of innocence, participant perceptions of the plea-bargaining decision-making process shared through an open-ended question, and negative contemplative emotions.

Blameworthiness and Innocence. Two questions assessed the participants' perceptions of blameworthiness for the accident and child's injury, and one question assessed their "objective" perception of innocence (recoded as 0 = *guilty*, 1 = *somewhere in between*, 2 = *innocent*). Participants were randomly presented with either the

blameworthiness questions then the innocence question or vice versa. The correlation between the two blameworthiness questions was .81, so a single summed blameworthiness score was computed for each participant.

Open-Ended Decision-Making Questions. Because there anecdotally seemed to be individual differences in participants' responses to these open-ended questions in a past study (Clatch & Borgida, Study 2), they were repeated in the present study. Participants answered (Question 1) why they think most people accept plea bargains, (Question 2) why they individually accepted plea bargains, (Question 3) why they think most people go to trial, and (Question 4) why they individually chose to go to trial. Participants' responses were coded by two independent coders according to the Coding Manual (see SM 9 for the coding manual details).

Negative Contemplative Emotions. Four questions assessed participants' pleasant and unpleasant feelings that they experienced while imagining waiting for trial and during trial. Unpleasant feelings were coded as negative numbers and participants feelings toward waiting for trial were strongly correlated (r = .84) with their anticipated feelings during trial. Thus, the two subscales were summed into a single value. Molouki and colleagues (2019) named these feelings *contemplation emotions* and found that these marginally mediated (p = .053) the relation between their manipulations (e.g., the time of an outcome being in the future versus in the past) and discounting. The present study adapted their original questions to fit the present context so that rather than being asked about participants' emotions about waiting to receive a jellybean they asked about anticipation of trial (see SM 6).

Demographic and Experience Predictors

The predictors in this section include demographic characteristics, criminal-justice-system experience, and driving and car accident experience.

Criminal-Justice-System Experience. Two questions assessed participants' criminal experience. The first question asked about their own, personal experience, and the second question asked about experience of someone close to them. The question about a participant's own criminal-justice-system experience was related to participant reports of the criminal justice system experienced by someone close to them ($\chi^2(1) = 38.24$, $p<.001$) such that 59% of the sample has not had any type of criminal justice system experience. Accordingly, analyses were run using a composite measure of criminal justice system experience.

Demographics and Driving/Accident Experience. Participants were asked their age, gender, race, and highest level of completed education. Then five questions queried whether participants drive, if they had ever been in a car accident (if so, how upsetting it was), and if they had been in a car accident in the last three months (if so, how upsetting it was).

Hypotheses

Like the Materials and Measures section, this section is organized into trait-level predictors of Subjective Trial Aversion scores, situated-person predictors of Subjective Trial Aversion scores, and experience-based predictors. Although there are no formal hypotheses for demographic characteristics or for driving and accident experience, these variables are analyzed in preliminary analyses and a later series of hierarchical regressions, serving as controls when all significant variables are entered into a single model to determine their relative importance in explaining plea-bargain decisions.

Trait-Level Predictors

Need for Cognitive Closure.

Hypothesis 1a. *Participants with higher Need for Cognitive Closure scores will seize-and-freeze, evincing more "stickiness" of their first plea-trial choice (i.e., choose all "trial" or all "plea," corresponding to Subjective Trial Aversion scores of 88 or 32, see SM 4) than will participants with lower Need for Cognitive Closure scores.*

Hypothesis 1b. *Participants with higher NFCC scores will seize-and-freeze across the Delays, evincing smaller variation in Subjective Trial Aversion scores across the Delays.*

Adapted System Justification.

Hypothesis 1c. *Individuals with high System Justification will have lower Subjective Trial Aversion scores (i.e., be more likely to go to trial) than will individuals with low System Justification).*

Hypothesis 1d. *Participants' system justification will interact with their ordinal perceptions of Innocence to predict their plea decisions, such that participants with high System Justification who also believe they are innocent will have lower Subjective Trial Aversion scores (i.e., evince the most willingness to go to trial), and participants with high System Justification who also believe they are guilty will have higher Subjective Trial Aversion scores (i.e., evince the most willingness to accept a guilty plea).*

Impulsivity.

Hypothesis 1e. *Highly impulsive participants will prefer the uncertain/risky option, trial, evincing lower Subject Trial Aversion scores, relative to less impulsive participants.*

Hypothesis 1f. *Participants' impulsivity will interact with Probability of Trial Conviction, such that highly impulsive participants will be especially sensitive to probability, evincing a stronger positive relation between Probability of Trial Conviction and Subjective Trial Aversion scores than will less impulsive participants.*

Hypothesis 1g. *Participants' impulsivity will interact with Delay until Trial, such that low-impulsivity participants will be especially sensitive to the trial's delay, evincing a stronger positive relation between Delay until Trial and Subjective Trial Aversion scores than will more impulsive participants.*

Situated-Person Predictors

Blameworthiness and Innocence.

Hypothesis 1h. *Participants experiencing more self-blame for the accident and the child's injury will have higher Subjective Trial Aversion scores than will participants experiencing less self-blame.*

Hypothesis 1i. *Participants who perceive themselves to be less innocent of the crime charged will have higher Subjective Trial Aversion scores than will participants who perceive themselves to be more innocent.*

Hypotheses 1j and 1k. *Neither participants' self-blame nor their perceptions of Innocence will interact with Probability of Trial Conviction to Subjective Trial Aversion scores.* That is, blameworthiness and innocence are more accurately described as individual perceptions and beliefs developed after reading the scenario rather than influenced by the situational cue of probability of losing at trial.

Negative Contemplative Emotions.

Hypothesis 1l. *Participants with higher Negative Contemplative Emotions will have higher Subjective Trial Aversion scores than will participants with weaker negative anticipatory emotions.*

Hypothesis 1m. *Negative Contemplative Emotions will moderate the relation between Waiting-for-Trial Location and Subjective Trial Aversion scores*. Specifically, participants in the Jail condition should exhibit stronger Negative Contemplative Emotions and have the highest Subjective Trial Aversion scores because jail should make the wait until trial especially negative to contemplate relative to considering the wait until trial while living one's life as usual (i.e., participants are out on bail).

Hypothesis 1n. *In the jail condition, Negative Contemplative Emotions will moderate the relation between Delay until Trial and Subjective Trial Aversion scores.* Specifically, for participants in the Jail condition, their negative anticipatory emotions about trial should determine the strength of the relation between Delays and their Subjective Trial Aversion scores because waiting in jail and having negative emotions sensitizes participants to the delay spent in jail while waiting for trial.

Criminal Justice System Experience

Hypothesis 1o. *Participants with Criminal Experience will have lower Subjective Trial Aversion scores (i.e., evince more willingness to go to trial) than will their inexperienced counterparts*.

Results

This section is organized into preliminary analyses, hypothesis testing, and cross-construct hierarchical modeling. The preliminary analyses section includes the testing of the demographic and driving-accident variables as well as a general descriptive

assessment of Subjective Trial Aversion scores. The hypothesis-testing section reports mixed-method regression results for each of the hypotheses for the trait-level predictors and the situated-person predictors as well as criminal experience. The cross-construct-modeling section describes the hierarchical modeling done to determine the relative importance of the various predictors to plea-bargain decision-making.

Preliminary Analyses

SM 10 is a comprehensive resource that shows the exploratory relations between demographic and trait-level predictors, which are provided for background.

Subjective Trial Aversion

Figure 1 shows the distribution of average Subjective Trial Aversion scores for the entire sample across all probability and delay conditions. The largest proportion of participants (22.1%, N=88) always accepted a plea bargain, but the second largest proportion of participants (11.3%, N=45) never accepted a plea deal and always chose to go to trial. Although the effect of Delay until Trial and Probability of Trial Conviction was reported in Clatch & Borgida's Study 3 (2021), Figure 2 shows the change in the distribution based on the level of the two key experimental variables, probability and delay, to provide context to the later interactions between probability or delay and other predictor variables. Figure 2's top panel shows the distribution broken down by level of Probability of Trial Conviction, descriptively presenting the experimental main effect of Probability of Trial Conviction on Subjective Trial Aversion scores. The proportion of participants who only chose trial (rejecting all pleas) ranged from 2% to 13% across conditions, and the proportion of participants who only accepted pleas (rejecting all trial options) ranged from 13% to 37.4%.

Figure 2's bottom panel shows the distribution broken down by Delay until Trial condition, descriptively presenting the experimental main effect of Delay until Trial on Subjective Trial Aversion scores, which runs counter to studies examining monetary outcomes. The proportion of participants who only chose trial (rejecting all pleas) ranged from 14.6% to 25.4% across conditions, and the proportion of participants who only accepted pleas (rejecting all trial options) ranged from 31.5% to 40.8%.

Accident Analyses

Table 1 shows the results of a series of simple linear regressions conducted to determine whether having ever been in a car accident or having been in a car accident within the last three months (as well as how upsetting those accidents were) influenced participants' patterns of plea-bargain decisions (i.e., Subjective Trial Aversion scores), Blameworthiness, or Perceptions of Innocence. None of the regressions predicting Blameworthiness revealed significant effects. The only regression predicting Subjective Trial Aversion scores that revealed a significant effect involved recent car accident experience. Specifically, participants who had been in an accident in the last three months had significantly lower Subjective Trial Aversion scores (i.e., rejected the plea bargain and chose to go to trial more; $M = 52.73$, $SD = 13.53$) than did people who have not ($t(384) = 2.62$, $p < .01$; $M = 61.68$, $SD = 20.93$). Accordingly, having been in an accident in the last three months was entered into the hierarchical regressions as a control; see the cross-construct modeling section below for evidence that as a control variable, it did not increase predictive utility of the overall model with experimental variables.

Perceptions of Innocence were significantly influenced by ever having been in an accident and marginally influenced by being in an accident in the last three months. In

both cases, people that had been in an accident (ever or recently) perceived that in the hypothetical scenario they were more innocent (ever: $M = 1.05$, $SD = .86$; recently: $M = 1.21$, $SD = .81$) than did people who had not be in an accident (ever: $t(354) = 2.03$, $p < .05$, $M = .86$, $SD = .85$; or recently: $t(41) = 1.92$, $p = .06$, $M = .92$, $SD = .85$).

Demographic Analyses

Table 2 shows the results of a series of simple linear regressions conducted to determine whether various demographic features influenced participants' plea-bargain decisions (i.e., Subjective Trial Aversion scores). Age and Race[18] did not significantly predict patterns of plea-bargain decisions. In contrast, Gender and Education did significantly predict plea-bargain decisions. Specifically, men were more likely to choose to go to trial (i.e., have lower Average Subjective Trial Aversion scores; $M = 58.09$, $SD = 19.05$) than women ($t(384) = 2.03$, $p < .05$, $M = 62.18$, $SD = 20.45$). Additionally, Education significantly predicted Subjective Trial Aversion scores; Table 4 shows the regression estimates and standard errors. Follow-up pairwise comparisons revealed that participants with a High school education were significantly less willing to go to trial (i.e., had higher Subjective Trial Aversion scores; $M = 68.13$, $SD = 23.20$) than College graduates ($t(28) = 2.39$, $p < .05$, $M = 56.91$, $SD = 18.01$). Moreover, Gender and Education did not interact to predict Subjective Trial Aversion scores; Table 2 also shows the regression estimates and standard errors for that multiple regression. Accordingly, Gender and Education were entered into the hierarchical regressions as controls; see the cross-construct modeling section below for the results of those hierarchical regressions.

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[18] This was true regardless whether all Race categories were included, limited to three categories (White-Hispanic, White-Non-Hispanic, and Other), or limited to two categories (White-Non-Hispanic vs. Other).

Hypothesis Testing

All of Study 1's analyses not involving the experimental variables of Probability of Trial Conviction, Delay until Trial, or Waiting-for-Trial Location were conducted using linear regressions based on participants' average Subjective Trial Aversion scores. However, when one of the experimental factors interacted with another predictor, linear mixed effects models were conducted due to the mixed-factor design of the experiment.

Trait-Level Predictors

Need for Cognitive Closure. In order to test ***H1a***, Subjective Trial Aversion scores were recoded into a binary variable and then an ordinal variable. First, participants' Subjective Trial Aversion scores were recoded into the binary variable, Seize, by coding all-one-decision strategies (i.e., Trial-Trial-Trial-Trial or Plea-Plea-Plea-Plea) as a 1, and all other decision patterns (e.g., Trial-Trial-Plea-Trial) as a 0. Table 3 shows the results of the simple logistic regression on Seize. Counter to the hypothesis, participants with higher NFCC scores were *less* likely to exhibit all-one-decision strategies compared to participants with lower NFCC scores (B = -.04, SE = .01, $p <$ .001).[19]

Next, to test ***H1b***, the range of each participant's five Subjective Trial Aversion scores were calculated (i.e., across their five total Subjective Trial Aversion scores, one for each Delay). Counter to the hypothesis, participants with higher Need for Cognitive Closure scores had a *wider* range in their Subjective Trial Aversion scores rather than

[19] SM 11's top panel shows the relation graphically, if the reader prefers that form.

narrower range (B = .24, SE = .09, p < .01). Table 3 shows the regression coefficient and standard error.[20]

Adapted System Justification. Table 4 shows the null results of the multiple linear regression conducted to test ***H1c*** and ***H1d***.

Impulsivity. First, as shown in Table 4, a simple linear regression confirmed ***H1e***, revealing that higher Impulsivity scores would predict lower Subjective Trial Aversion scores (B = -3.44, SE = 1.20, p < .001). Second, a multiple linear regression confirmed an Impulsivity * Probability of Trial interactive effect on Subjective Trial Aversion scores (B = -2.88, SE = .42, p < .001). However, the interaction plot shown in Figure 3 reveals that participants with *lower* Impulsivity scores, based on a median-split, were more responsive to the feature of Probability of Trial Conviction than were participants with higher Impulsivity, directly counter to ***H1f***. Third, as shown in Table 4, a multiple linear regression confirmed H7's Impulsivity * Delay interaction effect on Subjective Trial Aversion scores (B = -.08, SE = .03, p < .01). The interaction plot in Figure 4 reveals that participants with lower Impulsivity scores were more responsive to the feature of Delay until Trial than were participants with higher Impulsivity.

Situated-Person Predictors

Blameworthiness and Innocence. Table 4 shows the results of the simple and multiple regressions conducted for these variables on Subjective Trial Aversion scores. First, a simple linear regression confirmed ***H1h***'s prediction—that higher Blameworthiness scores predict higher average Subjective Trial Aversion scores (i.e.,

[20] SM 11's bottom panel shows the upward sloping regression line in a scatterplot, if the reader prefers that form.

accepted more pleas, avoided trial more; $B = .07$, $SE = .02$, $p < .001$). However, contrary to ***H1j***, a multiple linear regression showed that Blameworthiness and Probability of Trial Conviction interacted to predict Subjective Trial Aversion scores ($B = -.09$, $SE = .04$, $p < .05$). Figure 5 shows the interaction between Blameworthiness and Probability of Trial Conviction based on a median-split of Blameworthiness. The figure illustrates that participants randomly assigned to one of the two highest Probabilities of Trial Conviction, 95% or 99%, did not differ in their patterns of plea decisions regardless of how much they blamed themselves, evinced by Subjective Trial Aversion scores that are very similar; however, for participants randomly assigned to the two lowest Probabilities of Trial Conviction, 5% or 50%, how much participants blamed themselves made a larger difference for their plea decisions such that when participants blamed themselves more, they accepted more pleas.

Second, a simple linear regression confirmed ***H1i***, predicting that participants who perceived themselves to be more guilty would report higher Subjective Trial Aversion scores (i.e., accepted more pleas, avoided trial more) than would participants who perceived themselves to be innocent ($B = -3.44$, $SE = 1.20$, $p < .01$). Additionally, a multiple linear regression confirmed ***H1k***'s predicted lack of significant interaction between Innocence and Probability of Trial Conviction (see Table 4 for beta and standard errors of the multiple regression).

Negative Contemplative Emotions. First, a simple linear regression confirmed ***H1l***'s prediction that higher Negative Contemplative Emotions predicted higher Subjective Trial Aversion scores (i.e., accepted more pleas, avoided trial more; $B = -.07$, $SE = .01$, $p < .001$). Second, a multiple linear regression did not confirm ***H1m***'s expected

interaction between Negative Contemplative Emotions and Waiting-for-Trial Location (see Table 4 for betas and standard errors). Third, using a subset of the data (Jail condition only),[21] a multiple linear regression confirmed ***H1n***'s predicted interaction between Negative Contemplative Emotions and Delay until Trial in predicting Subjective Trial Aversion scores (B = -.02, SE = .003, $p < .001$). Figure 6 shows an interaction such that for people with above-median Negative Contemplative Emotions, as Delay until Trial increased so did Subjective Trial Aversion scores (i.e., more plea-bargain acceptance), but for people with below-median Negative Contemplative Emotions, there was little effect of Delay until Trial on Subjective Trial Aversion scores.

Open-Ended Decision-Making Questions. None of the qualitatively coded categories significantly predicted Subjective Trial Aversion scores, and the statistics produced by the series of simple linear mixed effects regressions are in SM 12.

Criminal Experience

Counter to ***H1o***, the simple linear regression revealed no relation between Criminal Experience and Subjective Trial Aversion scores, despite attempts at recoding the predictor in various ways (see Table 4's reference for the "Any," "Own," "Other," and "Categorical" versions of the variable).

Cross-Construct Modeling

Although the foregoing analyses in this study demonstrate some relations between person variables and plea-bargain decision-making, their impact relative to the situational experimental variables is not yet clear. Thus, hierarchical linear mixed effect regressions

[21] As mentioned in this study's introduction, participants in the Jail condition were likely to have the strongest negative feelings about trial, so this condition was the most likely condition to find the interaction between Negative Contemplative Emotions and Delay.

were conducted to test whether the effects of independently significant person variables account for variance in plea-bargain decisions above and beyond experimental variables. To reduce the tables referenced in this section, the statistical information for any steps in the hierarchical regressions conducted that did *not* produce a significant improvement in the model were placed in supplemental materials.

The preliminary step was to enter experimental variables (Probability of Trial Conviction, Delay until Trial, and Waiting for Trial Location) into a model predicting Subjective Trial Aversion scores (all models shown in in Table 5). Next, in Model 2a, the demographic variables of Gender and Education were entered into the model. Model 2a predicted Subjective Trial Aversion scores better than Model 1 ($\chi^2(2) = 19.90$, $p < .001$; Model 1's AIC was 16300 and Model 2a's AIC was 16286). Model 2a's betas and standard errors can be seen in SM 13. Next, because Gender was nonsignificant in Model 2a, Model 2b was run excluding Gender. Model 2b was still significantly different from Model 1 ($\chi^2(1) = 16.84$, $p < .001$; Model 1's AIC was 16300 and Model 2b's AIC was 16285), but Model 2a with Gender in it was not significantly different from Model 2b ($\chi^2(1) = 3.06$, $p > .1$). Model 2b is shown in Table 5. Next, Model 3a used Model 2b as a starting point since Models 2a and 2b did not differ in the amount of variance they explained but Model 2b uses fewer predictors. In Model 3a, the control variable of recent driving-accident experience was entered into the model. Model 3a was not significantly different than Model 2b ($\chi^2(1) = 0.32$, $p > .1$; Model 2b's AIC was 3150.1 and Model 3a's AIC was 3151.7). Model 3a's betas and standard errors can be seen in SM 14.

Next, in Model 3b, Impulsivity was entered into Model 2b. Adding in Impulsivity significantly improved the model ($\chi^2(1) = 17.75$, $p < .001$; Model 2b's AIC was 16285

and Model 3b's AIC was 16269), and Impulsivity significantly predicted Subjective Trial Aversion scores, containing the second largest effect size (r^2 = .03) after PTC (r^2 = .04; see Table 5). Last, in Model 4, the situated person variables of Blameworthiness, Negative Contemplative Emotions, and Perception of Innocence were entered into Model 3b. Adding in the situated person variables significantly improved the model ($\chi^2(1)$ = 37.51, $p < .001$; Model 3b's AIC was 15370 and Model 4's AIC was 15339). Model 4's betas, standard errors, semi-partial correlation coefficients, and confidence intervals can be seen in Table 5.

Discussion

Overall, Study 1 provides evidence that there are various person variables that independently and/or interactively affect plea-bargain decisions and may also affect discounting of non-monetary losses more generally. This discussion section will describe the impact of the following predictor categories' impact on subjective trial aversion: (1) person variables, including demographic and trait-level individual differences, and (2) situated-person variables, including Blameworthiness and Perceptions of Innocence. Then, the discussion section will use two situated-person variables as outcome measures and describe how the hypothetical scenario impacted participants' perceptions of innocence and blameworthiness.

Person Variables

First, men were more likely to choose to go to trial and participants with at least a college degree were more likely to choose to go to trial. Second, participants with higher impulsivity were more likely to choose to go to trial than were participants with lower impulsivity; and participants with higher impulsivity were less responsive to the

situational variables of Probability of Trial Conviction and Delay until Trial than were participants with lower impulsivity.

Consistent with findings by Myerson, Baumann, and Green (2017), Study 1 found that as delay increased, low-impulsivity participants were more likely to choose the immediate option—here, pleas, and in Myerson et al. (2017) a monetary payment—relative to high-impulsivity participants. However, contrary to the reasoning of Hypothesis 6, that highly impulsive individuals would be more sensitive to situational cues of risk, like probability of trial conviction, than less impulsive individuals, the present data suggested the exact opposite. Rather than highly impulsive people being sensitive to probability of trial conviction and responding accordingly, highly impulsive people simply maintained a baseline degree of risk-taking, going to trial more often than less impulsive people on average, and less impulsive people were more sensitive to probability of trial conviction, seeing it as a strong deterrent of going to trial. Figure 3 shows that once the Probability of Trial Conviction gets to 30% (at the intersection of the yellow and green lines) low-impulsivity participants avoid trial more than high-impulsivity participants.

Trait-level individual differences other than impulsivity did not predict plea-bargain decisions, however. Participants' levels of system justification were unrelated to the discounting of criminal sanctions. Although Clatch and Borgida (2021) did not specifically report regression statistics on this relation, unpublished analysis showed that system justification—in its original validated scale form—did not significantly predict plea decisions. And the present study, using an adapted version of system justification showed similar results, so it was removed from the cross-construct hierarchical models

once the experimental variables were revealed to explain the lion's share of the variance. These nonsignificant findings in part may be due to low reliabilities (.67 of the original system justification scale in Clatch & Borgida, 2021, and .65 of the adapted scale in the present study).

The null findings may also be due to oversimplified predictions. In particular, individuals with higher adapted System Justification may be more likely to choose to go to trial than to accept a plea to effectuate their Constitutional rights, or they may be more likely to accept a plea because that is the "typical" way criminal cases are resolved. After computing a median-split of adapted System Justification Scale scores, distributions of Subjective Trial Aversion scores descriptively revealed, as shown in Figure 6, that individuals with above-median system justification had less extreme patterns of plea-bargain decisions. Specifically, the modal categories of all- or almost-all pleas and all- or almost-all trials seen in the left panel's histogram both are smaller in size relative to the right panel's histogram, and the middle Subjective Trial Aversion scores, reflecting more nuanced, varied plea decisions increase in size. Thus, it may be that higher system justification in the current context is related to more nuanced decision-making and engagement in the series of plea-bargain decisions offered rather than related to a particular direction of decision (plea or trial). Study 2 will test this more nuanced hypothesis using the range of Subjective Trial Aversion scores as the key outcome variable.

Additionally, it was expected that, consistent with Clatch and Borgida's (Study 2, 2021) findings, participants with criminal experience would tend to choose to go to trial, but there were no significant effects of criminal experience on plea behavior in Study 1.

This may be because the effect of criminal experience is not robust, because the effect of criminal experience in the current dataset was wiped out because of data quality issues, or because the current measurement of criminal experience is too general to be reliably related to plea-bargain decisions. Continuing to measure participants' criminal experience across future studies will help determine whether the first possibility is empirically supported. Data-quality issues in the current dataset, which was collected in the first month of the COVID shut-downs, are reflected in bot-like responses like "The federal criminal justice system handles crimes committed on federal" and "worked in the criminal justice system as a corrections officer, charged with a crime," the latter of which was verbatim reported by multiple participants. Switching to Lucid and Prolific for this dissertation's later studies was done to increase data quality. The original, broad criminal experience questions may have been overbroad since participants responded to follow-up open-ended questions with, for example, "I served on a jury" and "studied some criminal justice in college." Adding specific criminal justice experiences questions will attempt to measure criminal justice experiences that pertain more specifically to plea-bargain decisions.

Need for cognitive closure has been theorized and empirically demonstrated to predict various operationalizations of the urgency ("seize") tendency and permanency ("freeze) tendency across psychological processes including intrapersonal, interpersonal, and group processes (Kruglanski & Fishman, 2009). The current plea-bargain decision task is best understood as an intrapersonal process in which participants' need for cognitive closure might influence their situational cue utilization such that participants with higher Need for Cognitive Closure scores seize and freeze on their first plea-trial

decision and stick to that decision within a decision tree as well as across the five Delay decision trees. However, results were inconsistent with that expected pattern. In order to understand the pattern of results presented it is important to understand the key outcome variable in these analyses: Subjective Trial Aversion scores' range.

Subjective Trial Aversion scores' range was calculated as range of the subjective scores across the five Delay decision trees, and because four plea-trial decisions determined each delay's subjective value, Subjective Trial Aversion scores' range took into account both within-delay decisional variation as well as across-delay decisional variation. Thus, follow-up analyses were conducted to determine patterns of plea-trial responses solely within delay decision trees (rather than within and across). Accordingly, each Delay decision tree's Subjective Trial Aversion score was recoded to describe the series of four plea-trial decisions (e.g., plea-trial-trial-trial). Then, based on that recoding a Consistency count was calculated based on how many of the last three plea-trial decisions in the Delay decision tree were consistent with the first decision. So the pattern "plea-trial-trial-trial" would have a Consistency score of 0 because the participant selected trial for decisions two, three and four in the decision tree. Because Delay's five levels were randomly ordered for each participant, Figure 8 shows the pattern of Consistency by "Delay Blocks" such that "Delay Block 1" is the first Delay decision tree seen by participants (regardless of the actual Delay presented) for participants with High and Low Need for Cognitive Closure scores (based on a median-split) in cross-tab form.

Notably, participants with lower Need for Cognitive Closure scores showed more Consistency (with Consistency scores of 3 more often) than did participants with higher Need for Cognitive Closure scores across all five Delay Blocks, and participants with

higher Need for Cognitive Closure scores more often had Consistency scores of 1 or 2 relative to participants with lower Need for Cognitive Closure scores across all five Delay Blocks. On its face this pattern of responding does not seem to be consistent with NFCC theory, but the pattern of responding suggests that the referent of "seize and freeze" matters. The hypotheses assumed that the most salient aspect of the decision would be the final decision to accept a plea versus go to trial. However, the pattern of responses may suggest that the most salient aspect of the decision was the criminal sanction associated with the plea bargain. Making a series of binary decisions that always change via the criminal sanction associated with the plea bargain can be understood as a negotiation between the structure of the skip logic and the participant—titrating to the participant's indifference point. De Dreu and colleagues (1999) found that participants with high NFCC put in the role of negotiators were more influenced by focal points when setting negotiation limits and making concessions than were participants with low NFCC. With the criminal sanction as the most salient feature being negotiated in a dual-discounting plea-bargain decision scenario, it is possible to re-interpret the findings as consistent with NFCC theory such that participants with higher Need for Cognitive Closure scores "seized" on the focal point of "60 days (2 months) in jail" which was the initial plea-offer across all decision trees and then changed their decision once the plea amount adjusted via the titration procedure (i.e., if they chose the plea first then chose trial or if they chose trial first then chose the plea). Thus, the anchoring effects of participants with higher Need for Cognitive Closure scores of De Dreu and colleagues (1999) may be reflected in the current study. Study 2 will proceed with both the original NFCC hypotheses as well as testing the anchoring effects hypothesis (such that

participants with higher Need for Cognitive Closure scores reached indifference points earlier in the titration process than did participants with lower Need for Cognitive Closure scores because they were anchoring on the initial plea offer which systematically adjusts, seemingly compromising, via the titration procedure).

Situated-Person Variables

Participants who perceived themselves to be innocent were less likely to accept plea bargains, and participants who believed themselves more blameworthy for the car accident and child's injury were more likely to accept guilty pleas. Moreover, because Perceptions of Innocence did not interact with Probability of Trial Conviction, this may indicate that perceptions of innocence are influenced more by features of the crime scenario than by participants' between-participants assignment of purported likelihood of success at trial.

Together, these results suggest that Perceptions of Innocence may be less influenced by Probability of Trial Conviction than perceptions of Blameworthiness. Figure 6's intersection lines indicate that when Probability of Trial Conviction is high (95% and 99%) participants' self-blame influences their decision less than when Probability of Trial Conviction is low. This may mean that when the evidence is stacked against a criminal defendant, resulting in a very high probability of trial conviction, defendants may be more willing to accept a plea regardless of their degree of self-blame; but when the evidence is not stacked against them, defendants may use their self-blame as a key factor to make their plea-bargain decisions. The lack of interactive effect of PTC and Perceptions of Innocence, on the other hand, suggests that their perception of innocence was scenario- or fact-based rather than likelihood based, making perceptions

of innocence a stable factor in their plea-bargain decision-making process, and less likely (than at least Blameworthiness) to be influenced by information about their likelihood of losing at trial.

The last situated-person variable, Negative Contemplative Emotions, had both a direct and interactive effect on plea-bargain decisions. Specifically, participants with highly negative emotions about trial were more likely to avoid trial and accept the plea. Additionally, when participants were told that their wait for trial would be spent in jail, participants' willingness to accept a plea increased as the delay until trial increased only for participants with above-median negative emotions about trial—not for participants with below-median negative emotions about trial, which suggests that when participants do not have strong negative emotions about the wait for trial, they are more inclined to disregard Delay until Trial in making their plea bargain decisions.

However, the predicted interaction between Negative Contemplative Emotions (NCE) and Waiting-for-Trial Location (WTL) was nonsignificant, so in order to understand that result, two follow-up regressions were conducted. First, a replication of the interaction between NCE and Delay until Trial (DUT) was conducted using the full dataset, rather than only the Jail subset. This was done to determine whether the effect of negative emotions only influences participants' sensitivity to delay until trial if they are waiting for trial in jail, or if that same pattern holds regardless of WTL condition. Table 4 shows the significant interaction beta coefficient and standard error. Second, to understand why the NCE*DUT relation holds across WTL conditions but WTL does not interact with NCE without DUT in the model, their three-way interaction was tested. Table 4 shows that NCE and DUT interacted in the Jail condition relative to the Bail

condition, and Figure 8's dotted red line in the left panel depicts that participants in the Jail condition who had above-median negative emotions were especially sensitive to delay, whereas the two other dotted red lines associated with Bail and Ambiguous conditions and all pink lines associated with below-median negative emotions were fairly flat.

Together, results of these regressions suggest that only waiting in jail *and* having especially negative emotions about trial made participants sensitive to the delay until trial. For these participants, as delay until trial increased, they were more likely to accept plea bargains. Thus, Study 1's findings regarding negative contemplative emotions adds psychological context to Clatch and Borgida's Study 3 (2021) finding that waiting-for-trial location moderates delay in plea-bargain decisions. Specifically, although Clatch and Borgida found that delay only influences plea-bargain decisions when participants must wait for trial in jail, when people have strong negative contemplative emotions, they further accentuate the influence of delay on decisions.

This finding is also consistent with Harris's (2012) dread hypothesis, which holds that anticipatory dread is a mechanism of delay discounting of non-monetary losses, as well as Molouki et al.'s (2019) finding that contemplative emotions increase the steepness of monetary delay discounting.

Factual Innocence

Notably, based on the vignette, all participants were arguably factually innocent, and yet 94.15% (n = 370) of participants reported feeling some degree of self-blame for the car accident or child's injury. Additionally, 65.78% (n= 246) of participants believed that they were either guilty or somewhere in between innocent and guilty. Furthermore,

the vast majority of participants accepted a false guilty plea, and Figure 2 shows how Probability of Trial Conviction and Delay until Trial shift the distributions of participants toward accepting more, and harsher, plea bargains. Thus, probability of trial conviction and delay until trial are situational features that push people toward accepting plea bargains *despite* factual innocence, which highlights the promise of discounting-plea-bargaining studies for better understanding real-world plea bargaining.

Limitations and Future Studies

Limitations of Study 1 include the fact that the sample is not nationally representative, and national representation matters for research attempting to describe and explain universal cognitive patterns and research attempting to generalize to real-world phenomena that affect Americans from all walks of life. Study 1 also does not measure study-task personal involvement nor recent life stress, and these are two variables, if controlled for in the model, might reveal different effects of key experimental variables. For example, people who are more involved in the task might accept more pleas because they take seriously the possibility of jail time, and people who have experienced more recent life stress might also be eager to resolve the criminal matter and take the plea to avoid dealing with the distraction of preparing for trial.

Also, in terms of the experimental manipulations, because Delay until Trial was manipulated within-participants, conclusions about how participants' person variables interact with Delay-until-Trial, as a matter of psychological process, are slightly more internally valid conclusions than conclusions about how participants' person variables interact with Probability of Trial conviction since the latter is randomly assigned between

participants. To remove this asymmetry in conclusion validity, Study 2 will manipulate Probability of Trial Conviction within participants.

Because this dissertation adopts the person-by-situation strategy, it is important to find individual differences that reliably (e.g., across sample sources, studies, and time-space) predict plea-bargain decisions and discounting of non-monetary losses. Consequently, the following rule will be used to decide what individual difference measures to assess in Studies 2–4: If there is no evidence (across two studies) that an individual difference measure predicts Subjective Trial Aversion scores (either directly via the main effect or interactively with a manipulated variable), it will not be measured in future studies. Accordingly, all individual differences measured in Study 1's dataset will be measured in Study 2. However, where there is evidence that a variable has a significant impact on Subjective Trial Aversion scores in the reverse direction than expected, competing hypotheses will be outlined.

Impulsivity as a unitary personality construct (see Duckworth & Kern, 2011) has recently been critiqued (see, e.g., Sharma et al., 2014), and the present study admittedly utilized only the Impulsiveness subscale of a 54-item personality questionnaire (Eysenck et al., 1985) which assesses self-reported Impulsiveness, Venturesomeness, and Empathy. However, because Myerson, Baumann, and Green (2017) found that only the Impulsiveness subscale of the I-7 was related to participants' discounting decisions, but not Venturesomeness or Empathy, and study length was at issue, Studies 2–4 will continue to use the I-7. However, conclusions about the Impulsiveness scale's ability to perfectly reflect a unitary personality construct will be avoided.

Overall, although person variables reached statistical significance in various regression models, once the experimental (situational) variables were entered into the model with the person variables it became clear that the experimental variables influenced decisions the most. This points to the power of situational features on human decision-making, which to large extent was expected based on the robustness of probability and delay in monetary discounting studies. To some extent, however, it was somewhat surprising that person variables, especially trait-level person variables did not carry more weight than they did. The trait-level person variables like Education and Impulsivity seemed to be less important to decision-making relative to the situated-person variables like Blameworthiness and Negative Contemplative Emotions.[22] Thus, although the situational variables explained the most variance in plea-bargain decisions relative to trait-level and situated-person variables, person variables still added predictive utility to the decision-making model, and certain person variables seem to be a lens through which participants perceived and reacted to the situational variables. This will be discussed in more detail in Chapter 6's general discussion.

[22] See Table 5's Model 4 to see that the latter two variables were significant but the former two were not.

Table 1

Study 1 Accident Regression Analyses

	Subjective Trial Aversion					Blame				Innocence (ordinal)			
Models/Variables	*B*	*SE*	R^2_m	R^2_c	95% *CI*	*B*	*SE*	R^2_a	95% *CI*	*B*	*SE*	R^2_a	95% *CI*
Accident Ever			.002	.68				-.002				.006	
Maybe	-2.81	6.47			(-15.46, 9.85)	20.15	18.88		(-16.96, 57.27)	.05	.28		(-.49, .60)
No	-2.04	2.05			(-6.06, 1.98)	.38	6.00		(-11.42, 12.17)	-.18*	.09		(-.36, -.01)
Accident Ever Upsetting			.001	.71				.008				-.001	
Upsetting	-.66	1.47			(-3.54, 2.22)	6.73	4.24		(-1.63, 15.09)	-.06	.06		(-.18, .07)
Accident 3-month			.02	.68				.008				.004	
Maybe	1.10	4.54			(-7.78, 9.99)	13.45	13.35		(-12.81, 39.70)	-.21	.21		(-.61, .20)
No	8.95**	3.42			(2.26, 15.64)	-8.47	10.06		(-28.24, 11.30)	-.28[m]	.16		(-.59, .02)
Accident 3-month Upsetting			.000	.41				.006				.02	
Upsetting	.04	1.88			(-3.63, 3.72)	6.41	5.38		(-4.32, 17.14)	-.22	.13		(-.49, .05)

Note. Models pertaining to how upsetting the accidents were only used data from participants who had reported "Yes" or "Maybe" to ever being in an accident and being in an accident in the last three months respectively because participants who responded "No" were not asked how upsetting their non-existent accident was. The reference category for Models 1 and 3 are "Yes." For the Subjective Trial Aversion dependent variable, two *R*-squared statistics are provided for each model because generalized, mixed effects regression models were used, producing marginal R^2 for the fixed effects, and R^2 for the combined fixed and random effects. For the Blameworthiness and Perception of Innocence dependent variables, the adjusted R^2 statistics were provided.

[m].05 ≤ *p* ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 2

Study 1 Demographics Regression Analyses

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	95% *CI*
Age	.09	.09	.002	.67	(09, .27)
Race			.003	.67	
White, Non-Hispanic	-3.56	3.65			(-10.7, 3.59)
White, Hispanic	-3.83	3.16			(-10, 2.35)
Black, Non-Hispanic	-2.22	3.16			(-10.3, 5.85)
Education			.04	.68	
Some College	-.60	4.58			(-9.56, 8.36)
College Graduate	-11.21**	4.03			(-19.08, -3.34)
Graduate School	-6.83	4.49			(-15.61, 1.94)
Gender			.008	.68	
Male	-4.09*	2.03			(-8.07, -0.12)
Other	3.97	10.02			(-15.65, 23.59)
Gender*Education			.04	.68	
Male	-8.70*	4.24			(-16.98, -.42)
Education_binary	-12.74***	3.51			(-19.60, -5.88)
Male:Education_binary	5.90	4.80			(-3.47, 15.27)
Gender*PTC			0.12		
Male	-3.19	3.50	0.002		(-10.0, 3.62)
Other	-8.29	13.94	0.001		(-35.5, 18.89)
PTC	19.20***	3.50	0.05		(12.4, 26.03)
Male:PTC	-0.57	4.85			(-10.0, 8.88)
Other:PTC	28.25	20.25	0.004		(-11.2, 67.73)
Gender*DUT			0.01		
Male	-3.16	2.09	0.003		(-7.25, 0.93)
Other	0.78	10.31			(-19.39, 20.96)
DUT	0.09***	0.02	0.003		(0.05, 0.14)
Male:DUT	-0.06^m	0.03	0.001		(-0.12, 0.001)
Other:DUT	0.20	0.15			(-0.10, 0.49)
Gender*DUT*WTL			0.02		
Male	-3.41	3.76	0.001		(-10.7, 3.89)
Other	28.45	20.62	0.002		(-11.6, 68.50)
DUT	0.04	0.04			(-0.04, 0.12)
Bail	1.84	3.79			(-5.53, 9.20)
Jail	1.14	3.93			(-6.48, 8.77)
Male:DUT	-0.01	0.05			(-0.12, 0.10)
Other:DUT	-0.04	0.30			(-0.62, 0.54)
Male:Bail	-1.54	5.13			(-11.5, 8.42)
Other:Bail	-29.84	25.29	0.002		(-79.0, 19.29)

Male:Jail	2.78	5.13		(-7.43, 12.98)
Other:Jail	-51.42^{m}	29.14	0.004	(-108, 5.18)
DUT:Bail	0.04	0.05		(-0.07, 0.15)
DUT:Jail	0.12*	0.06	0.001	(0.008, 0.23)
Male:DUT:Bail	-0.06	0.07		(-0.20,0.09)
Other:DUT:Bail	-0.04	0.36		(-0.75, 0.67)
Male:DUT:Jail	-0.08	0.08		(-0.22, 0.07)
Other:DUT:Jail	1.05*	0.42	0.001	(0.023, 1.86)
Education*PTC			0.13	
Education	1.57	2.20	0.001	(-2.73, 5.87)
PTC	48.68***	12.12	0.03	(24.99, 72.37)
Education:PTC	-7.64*	3.08	0.01	(-13.65, -1.62)
Education*DTC			0.02	
Education	-3.62**	1.35	0.009	(-6.27, -0.98)
DUT	0.02	0.08		(-0.13, 0.17)
Education:DUT	0.01	0.02		(-0.03, 0.05)
Education*DUT*WTL			0.02	
Education	-4.21^{m}	2.26	0.004	(-8.62, 0.21)
DUT	0.002	0.13		(-0.25, 0.25)
Bail	-4.32	12.96		(-29.58, 20.94)
Jail	2.80	13.05		(-22.65, 28.25)
Education:DUT	0.009	0.03		(-0.06, 0.07)
Education:Bail	1.52	3.28		(-4.88, 7.91)
Education:Jail	0.01	3.31		(-6.43, 6.46)
DUT:Bail	-0.00003	0.19		(-0.37, 0.37)
DUT:Jail	0.08	0.19		(-0.29, 0.45)
Education:DUT:Bail	0.002	0.05		(-0.09, 0.10)
Education:DUT:Jail	0.002	0.05		(-0.09, 0.10)

Note. The regressions using Gender as a predictor had "Female" as the reference category. The regressions using Race as a predictor had "Other" as the reference category. The regression using Education as a predictor had "High School" as the reference category. Note that the Gender*Education model with the original coding of Gender (with three levels: Male, Female, Other) and Education (with four levels High School, Part College, College Graduate, Graduate School) had ten parameters, so for this model to reduce parameters Gender: Other was excluded since only four participants

were in this category and Education was made binary with the 25 participants with a High school education grouped with the 59 participants with a part-of-college education and the 234 College graduates grouped with the 68 participants with a Graduate-school education. An R^2 statistic for the marginal (i.e., fixed effects) is provided and denoted as "R^2_m" and the mixed effects model's R^2 is provided and denoted as "R^2_c".

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 3

Study 1 Need for Cognitive Closure Analyses

Models/Variables	*B*	*SE*	*p*	Exp(B)	R^2_a	95% *CI*
Seize (binary) ~ NFCC	-.04	.01	<.001***	.97	.03	(-.05, -.02)
STA_range ~ NFCC	.24	.09	.01*	n/a	.02	(.06, .42)

Note. The adjusted R^2 statistics were provided.

[m].05 ≤ *p* ≤ .1. *$p < .05$. **$p < .01$. ***$p < .001$.

Table 4

Study 1 Hypothesized Relation Regressions

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	95% *CI*
Blameworthiness	.07***	.02	.03	.67	(.04, .10)
Blame*PTC			.13	.68	
PTC	29.45***	5.32	.05		(19.05, 39.86)
Blameworthiness	.11***	.03	.04		(.06, .17)
PTC:Blame	-.09*	.04	.02		(-.17, -.01)
Innocence_Categ			.02	.68	
Guilty	6.86**	2.38			(2.20, 11.52)
Don't Know	-2.83	4.74			(-12.08, 6.43)
Between	2.65	2.63			(-2.48, 7.79)
Innocence_Ordin*PTC			.12	.68	
PTC	18.26***	3.69	.05		(11.05, 25.46)
Innocence	-3.65[m]	2.04	.04		(-7.63, .34)
PTC:Innocence	1.37	2.89	.01		(-4.28, 7.01)
NCE	-.07***	.01	.07	.67	(-.09, -.05)
NCE*WTL			.09	.68	
NCE	-.06**	.02	.02		(-.09, -.02)
Ambiguous	-4.73	3.00	.004		(-10.59, 1.12)
Jail	2.28	2.89	.004		(-3.35, 7.91)
NCE: Ambiguous	-.04	.03	.001		(-.09, .01)
NCE:Jail	-.01	.03	.001		(-.06, .03)
NCE*DUT [Jail only]			.10	.57	
NCE	-.04*	.02	.05		(-.08, -.01)
DUT	.09	.37	.05		(-.64, .82)
NCE:DUT	-.02***	.003	.01		(-.02, -.01)
NCE*DUT [All Locations]			.08	.68	
NCE	-.06***	.01	.04		(-.08, -.04)
DUT	2.66	1.90	.01		(-10.63, 63.81)
NCE:DUT	-.05**	.02	.004		(-.86, -.20)
NCE*DUT*WTL [All Locations]			.1	.69	
NCE	-.05***	.02	.01		(-.09, -.02)
DUT	40.47	31.46			(-21.12, 102.05)
Ambiguous	-4.67	3.10	.003		(-10.71, 1.37)
Jail	2.79	2.98	.001		(-3.02, 8.60)
NCE: Ambiguous	-.04	.03	.003		(-.09, .01)
NCE:Jail	.01	.03			(-.04, .06)
NCE:DUT	-.04	.27			(-.58, .49)
DUT: Ambiguous	-3.94	46.76			(-95.47, 87.59)
DUT:Jail	-31.18	44.94			(-119.16, 56.78)
NCE:DUT: Ambiguous	-.11	.40			(-.67, .90)
NCE:DUT:Jail	-1.57***	.39	.001		(-2.34, -.81)
SJS	-.02	.09	.000	.67	(-.20, .16)
SJS*Innocence_Ordin			.02	.68	
SJS	-.13	.15	.002		(-.43, .16)
Innocence	-7.24	6.09	.003		(-19.15, 4.67)
SJS:Innocence	.07	.11	.001		(-.15, .30)
Impulsivity	-.85***	.19	.04	.67	(-1.23, -.48)
Impulsivity*PTC			.21	.67	
Imp	.83**	.30	.01		(.24, 1.41)

PTC	40.82***	3.75	.17		(33.49, 48.14)
Imp:PTC	-2.88***	.42	.08		(-3.70, -2.07)
Impulsivity*DUT			.04	.68	
Imp	-.72***	.20	.02		(-1.12, -.33)
DUT	1.30***	.27	.004		(.78, 1.82)
Imp:DUT	-.08**	.03	.001		(-.14, -.02)
Impulsivity*DUT*WTL			0.05		
Impulsivity	-1.04**	0.36	0.01		(-1.73, -0.35)
DUT	0.04	0.05			(-0.05, 0.13)
Bail	-1.49	4.31			(-9.89, 6.91)
Jail	-0.26	4.48			(-8.98, 8.47)
Impulsivity:DUT	-0.0006	0.005			(-0.01, 0.01)
Impulsivity:Bail	0.43	0.49	0.001		(-0.52, 1.38)
Impulsivity:Jail	0.45	0.49	0.001		(-0.51, 1.40)
DUT:Bail	-0.007	0.06			(-0.13, 0.12)
DUT:Jail	0.39***	0.07	0.004		(-0.17, 0.43)
Impulsivity:DUT:Bail	0.002	0.007			(-0.01, 0.02)
Impulsivity:DUT:Jail	-0.03***	0.007	0.002		(-0.04, -0.01)
Criminal Experience (Any)	-1.63	2.04	.001	.67	(-5.61, 2.36)
Criminal Experience (Own)	-1.80	2.37	.001	.67	(-6.43, 2.83)
Criminal Experience (Other)	.66	2.19	.000	.67	(-3.64, 4.95)
Criminal Experience (Categorical)			.006	.68	
Other Only	-.99	2.78			(-6.41, 4.44)
Own Only	-5.75[m]	3.41	.005		(-12.40, .91)
Both	.79	.79			(-5.13, 6.71)

Note. For the NCE*DUT [Jail only] model, DUT was rescaled by dividing by 10 to put it on a similar scale to NCE; for the NCE*DUT [All Locations] model, DUT was rescaled by dividing by 100 to put it on a similar scale to NCE; for the NCE*DUT*WTL model, DUT was rescaled by dividing by 1000 to put it on a similar scale to the other variables. The Imp*DUT model, DUT was rescaled by dividing by 10 to put it on a similar scale to Impulsivity. The reference group of the four-level Criminal Experience variable was "None" and the smallest p-value between the four groups was p = -.092. An R^2 statistic for the marginal (i.e., fixed effects) is provided and denoted as "R^2_m" and the mixed effects model's R^2 is provided and denoted as "R^2_c". The multiple regression predictor parameters' semi-partial correlations that are greater than or equal to .001 appear in the R^2_m column but in the rows of each parameter rather than the model-specification row.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 5.

Study 1 Cross-Construct Multiple Regressions

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	95% *CI*
Model 1			0.14	0.69	
PTC	25.18***	4.20	.04		(17.00, 33.36)
DUT	0.12*	0.05	.001		(0.02, 0.20)
Ambiguous	-2.16	4.30			(-10.54, 6.23)
Jail	6.34	4.32	.003		(-2.08, 14.77)
PTC:Delay	-0.11	0.06	.001		(-0.23, 0.02)
PTC:Ambiguous	1.41	6.01			(-10.31, 12.14)
PTC:Jail	-8.98	6.01	.003		(-20.69, 2.73)
DUT:Ambiguous	-0.03	0.07			(-0.16, 0.10)
DUT:Jail	0.28***	0.07	.003		(0.15, 0.41)
PTC:DUT:Ambiguous	0.04	0.09			(-0.15, 0.22)
PTC:DUT:Jail	-0.33***	0.09	.002		(-0.51, -0.15)
Model 2b			0.16	0.69	
PTC	24.89***	4.12	.04		(16.88, 32.91)
DUT	0.11*	0.05	.001		(0.02, 0.20)
Ambiguous	-2.28	4.22			(-10.50, 5.94)
Jail	6.23	4.24	.003		(-2.03, 14.48)
Education_binary	-9.05***	2.20	.03		(-13.34, -4.76)
PTC:Delay	-0.11	0.06	.001		(-0.23, 0.02)
PTC:Ambiguous	0.74	5.90			(-10.75, 12.23)
PTC:Jail	-8.77	5.89	.003		(-20.24, 2.71)
DUT:Ambiguous	-0.03	0.07			(-0.16, 0.10)
DUT:Jail	0.28***	0.07	.003		(0.15, 0.41)
PTC:DUT:Ambiguous	0.04	0.09			(-0.15, 0.22)
PTC:DUT:Jail	-0.33***	0.09	.002		(-0.51, -0.15)
Model 3b			0.19	0.69	
PTC	24.71***	4.04	.04		(16.86, 32.56)
DUT	0.11*	0.05	.001		(0.02, 0.20)
Ambiguous	-3.22	4.14	.001		(-11.27, 4.84)
Jail	6.16	4.15	.002		(-1.92, 14.24)
Education	-6.48**	2.24	.02		(-10.84, -2.13)
Impulsivity	-0.76***	0.18	.03		(-1.12, -0.41)
PTC:Delay	-0.11	0.06	.001		(-0.23, 0.02)
PTC:Ambiguous	1.94	5.79			(-9.32, 13.21)
PTC:Jail	-8.07	5.78	.002		(-19.31, 3.17)
DUT:Ambiguous	-0.03	0.07			(-0.16, 0.10)
DUT:Jail	0.28***	0.07	.005		(0.15, 0.41)
PTC:DUT:Ambiguous	0.04	0.09			(-0.15, 0.22)
PTC:DUT:Jail	-0.33***	0.09	.003		(-0.51, -0.15)

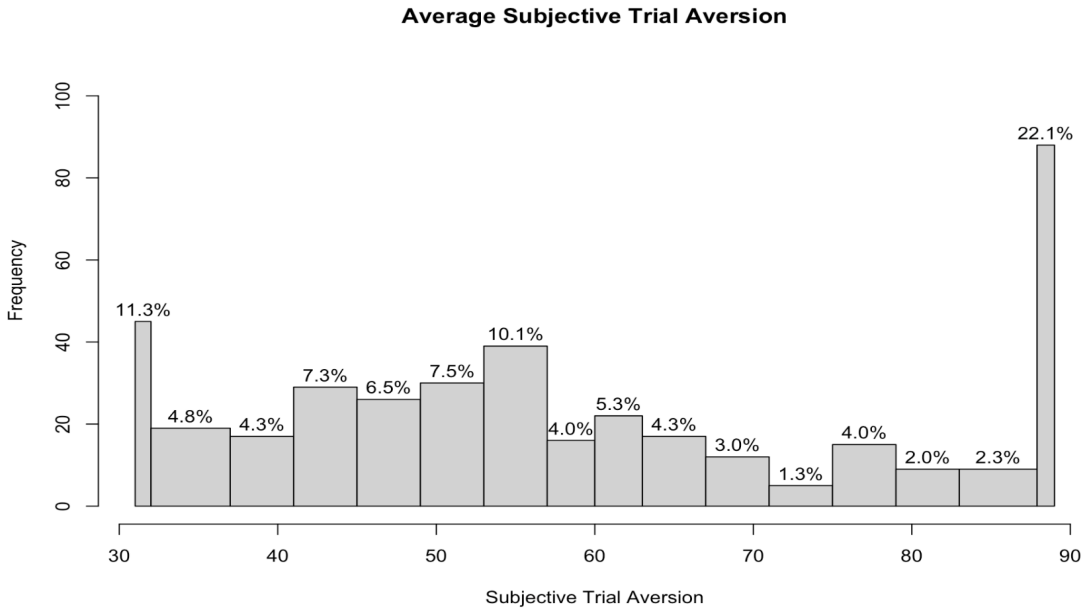
Model 4			0.24	0.70	
PTC	21.16***	4.01	.03		(13.39, 28.92)
DUT	0.11*	0.05	.001		(0.02, 0.20)
Ambiguous	-4.52	4.11	.001		(-12.47, 3.43)
Jail	2.40	4.20			(-5.73, 10.54)
Education	-3.99[m]	2.33	.005		(-8.49, 0.52)
Impulsivity	-0.34	0.23	.004		(-0.78, 0.09)
NCE	-0.05***	0.01	.03		(-0.08, 0.09)
Blameworthiness	0.07***	0.02	.03		(0.04, 0.11)
Innocence_Ordin	-0.23	1.17			(-2.49, 2.03)
PTC:Delay	-0.11[m]	0.07	.001		(-0.24, 0.02)
PTC:Ambiguous	4.03	5.74	.001		(-7.08, 15.15)
PTC:Jail	-2.52	5.85			(-13.85, 8.81)
DUT:Ambiguous	-0.03	0.07			(-0.16, 0.11)
DUT:Jail	0.32***	0.07	.005		(0.19, 0.46)
PTC:DUT:Ambiguous	0.03	0.09			(-0.16, 0.21)
PTC:DUT:Jail	-0.37***	0.10	.003		(-0.56, -0.19)

Note. An R^2 statistic for the marginal (i.e., fixed effects) is provided and denoted as "R^2_m" and the mixed effects model's R^2 is provided and denoted as "R^2_c". The multiple regression predictor parameters' semi-partial correlations that are greater than or equal to .001 appear in the R^2_m column but in the rows of each parameter rather than the model-specification row.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Figure 1

Study 1 Histogram of Total Average Subjective Trial Aversion Distribution



Note. In Study 1, five Subjective Trial Aversion scores were computed—one for each level of Delay since it was manipulated within-participants. For each participant, these 5 values were averaged and then graphed above. Notably, the distribution is bi-modal with one mode at each pole.

Figure 2

Study 1 Subjective Trial Aversion by Levels of Probability and Delay

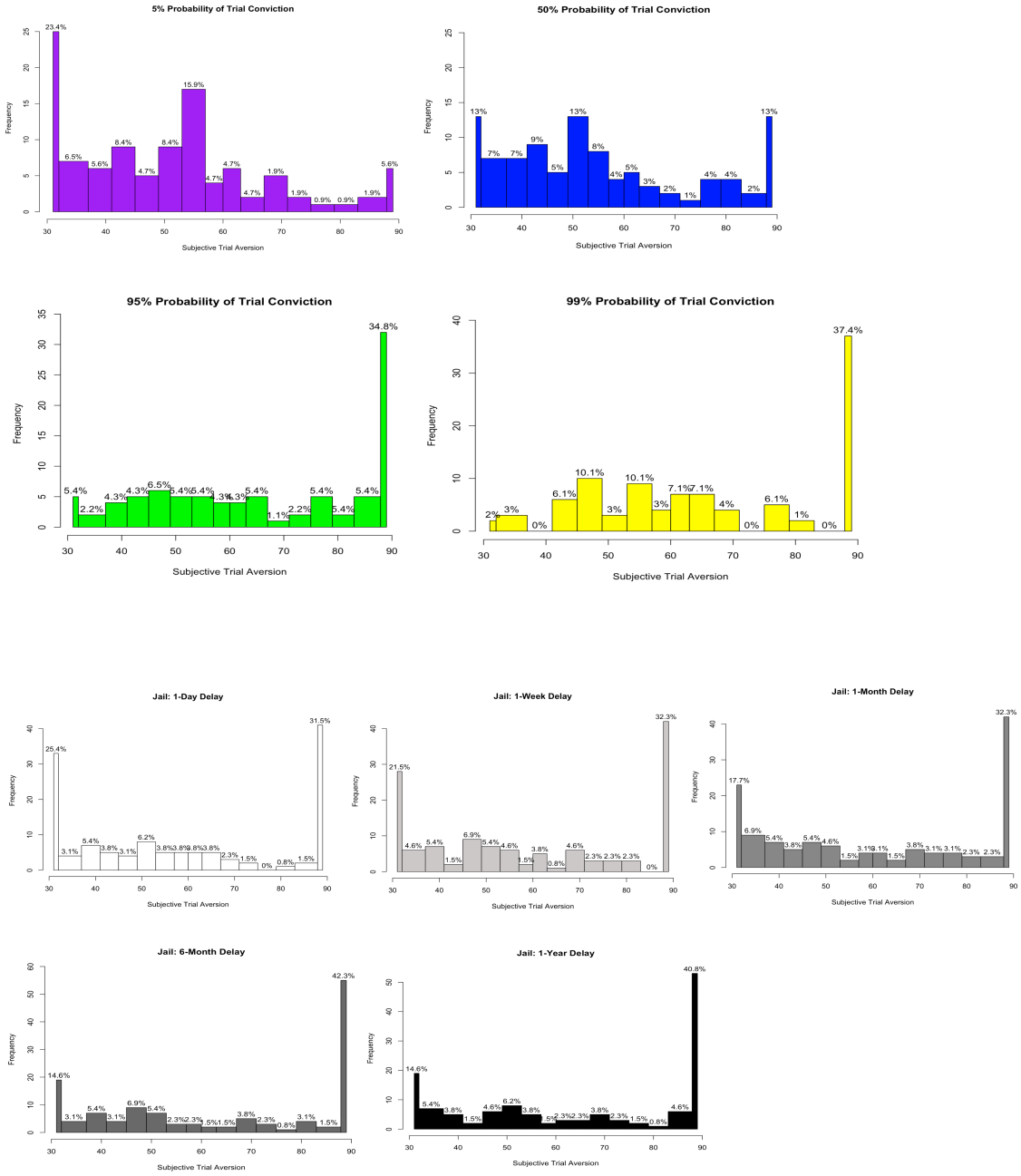


Figure 3

Study 1 Impulsivity*PTC Interaction on Subjective Trial Aversion

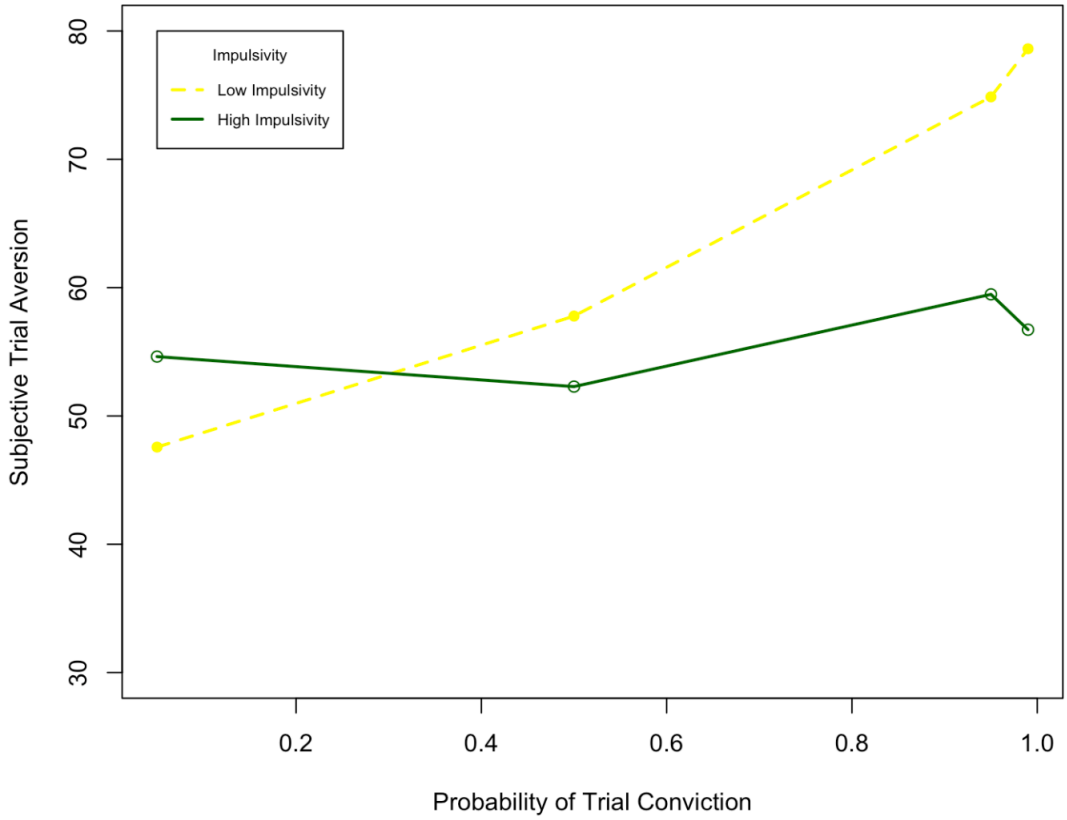


Figure 4

Study 1 Impulsivity*DUT Interaction on Subjective Trial Aversion

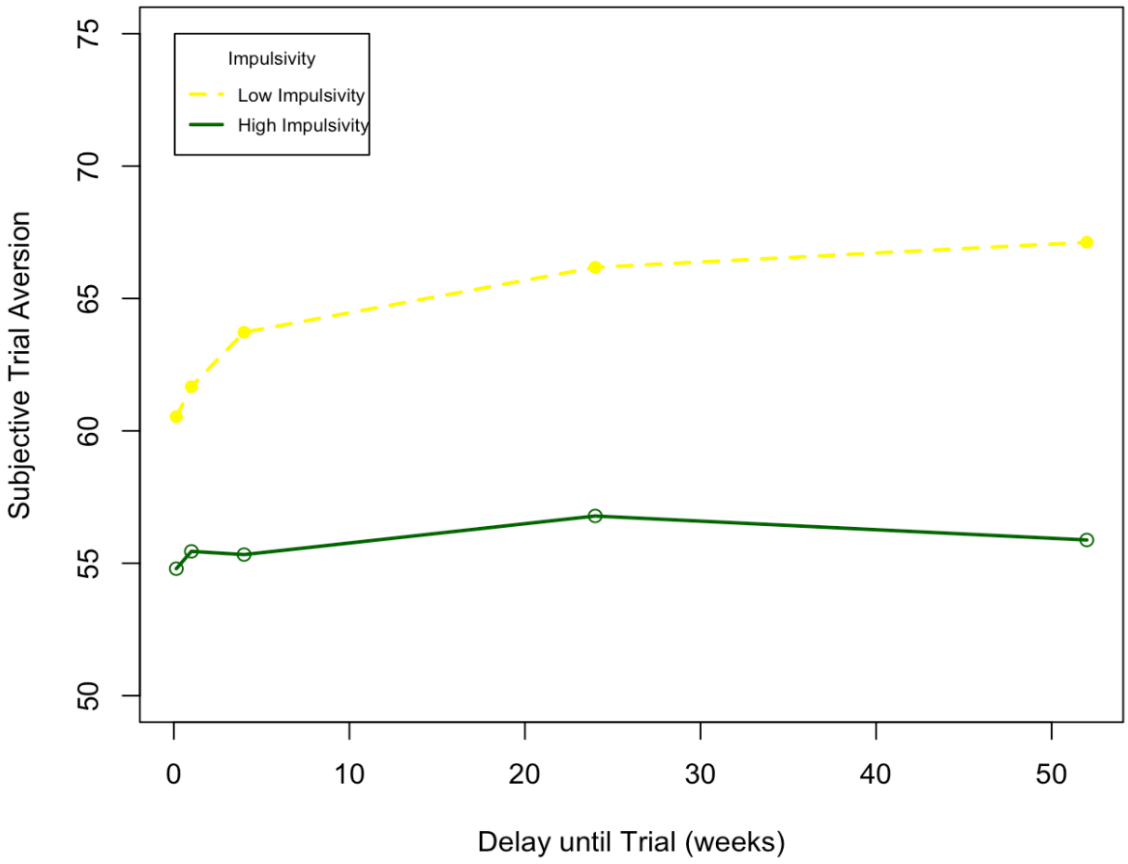


Figure 5

Study 1 Blameworthiness*PTC Interaction on Subjective Trial Aversion

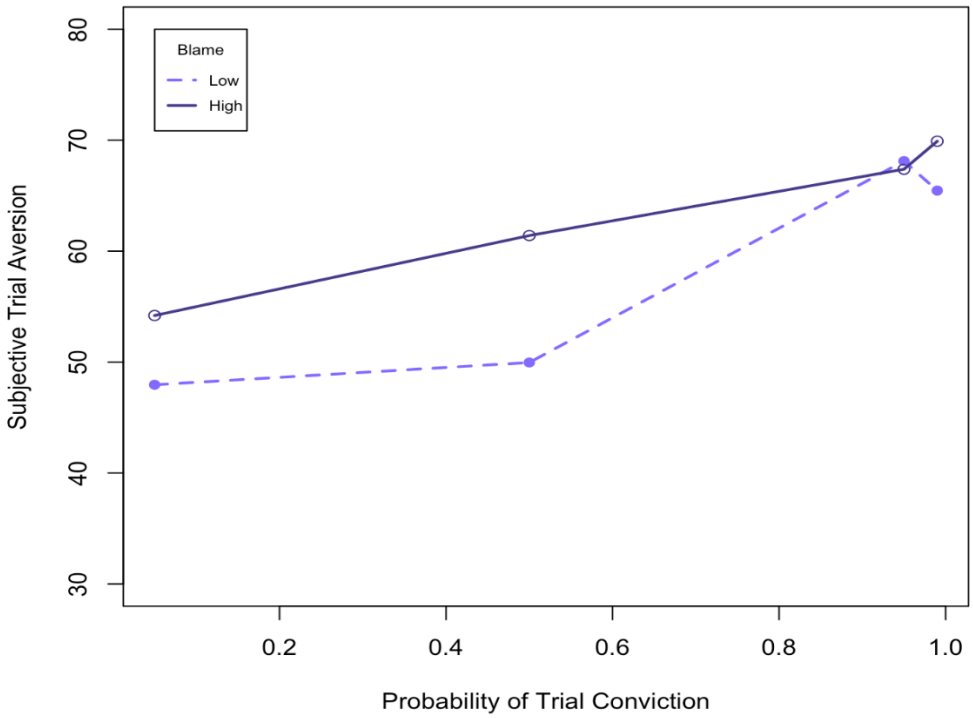


Figure 6

Study 1 NCE*DUT Interaction on Subjective Trial Aversion [Jail Only]

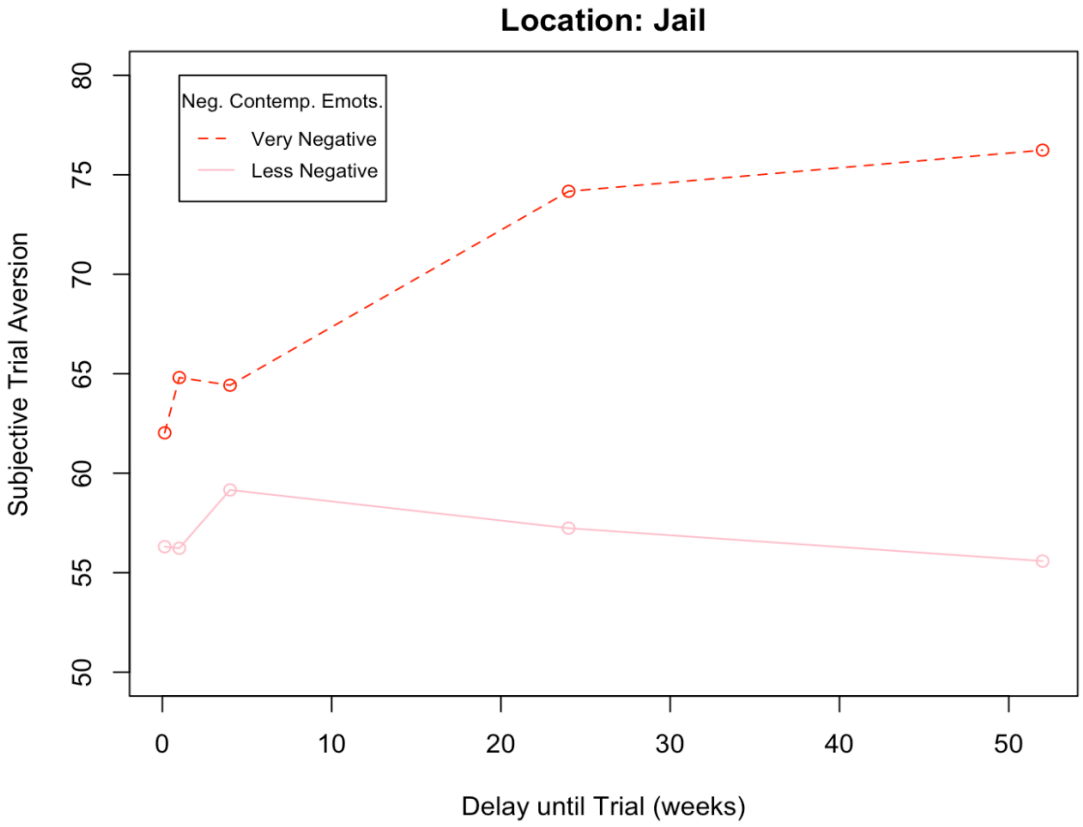


Figure 7

Study 1 Distribution of Subjective Trial Aversion based on System Justification Scores

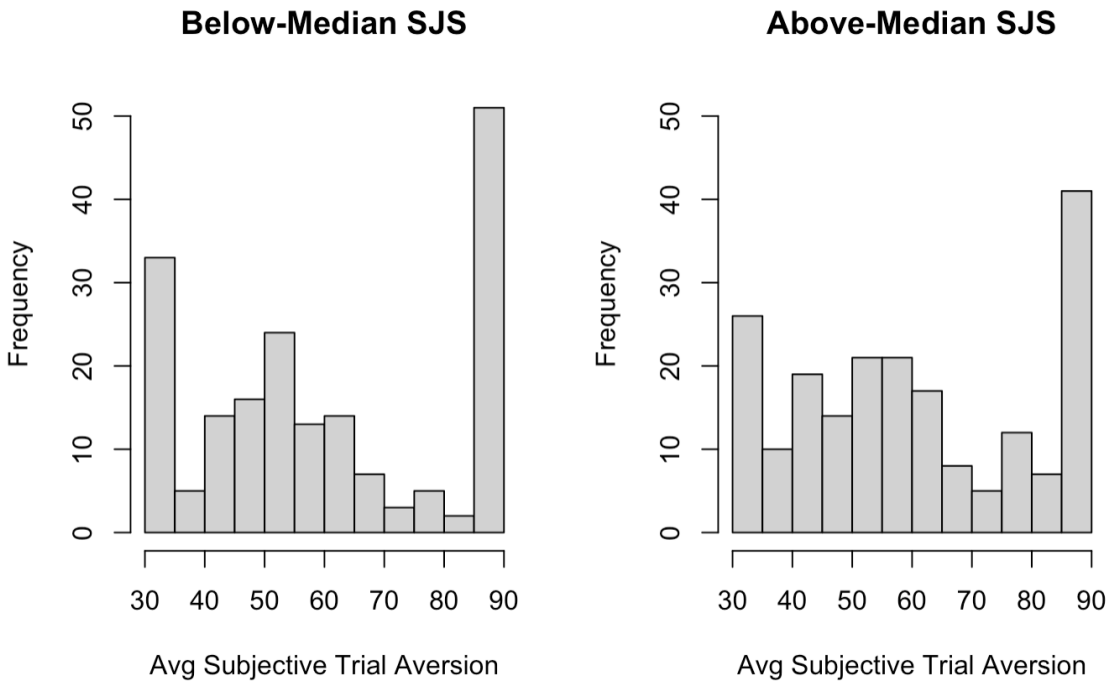


Figure 8

Study 1 Within-Delay-Decision-Tree Decision Patterns by NFCC Score

Delay Block 1

	0	1	2	3
High	6	45	54	85
Low	11	25	49	114

Delay Block 2

	0	1	2	3
High	12	56	38	84
Low	15	36	32	116

Delay Block 3

	0	1	2	3
High	8	45	38	99
Low	14	31	28	126

Delay Block 4

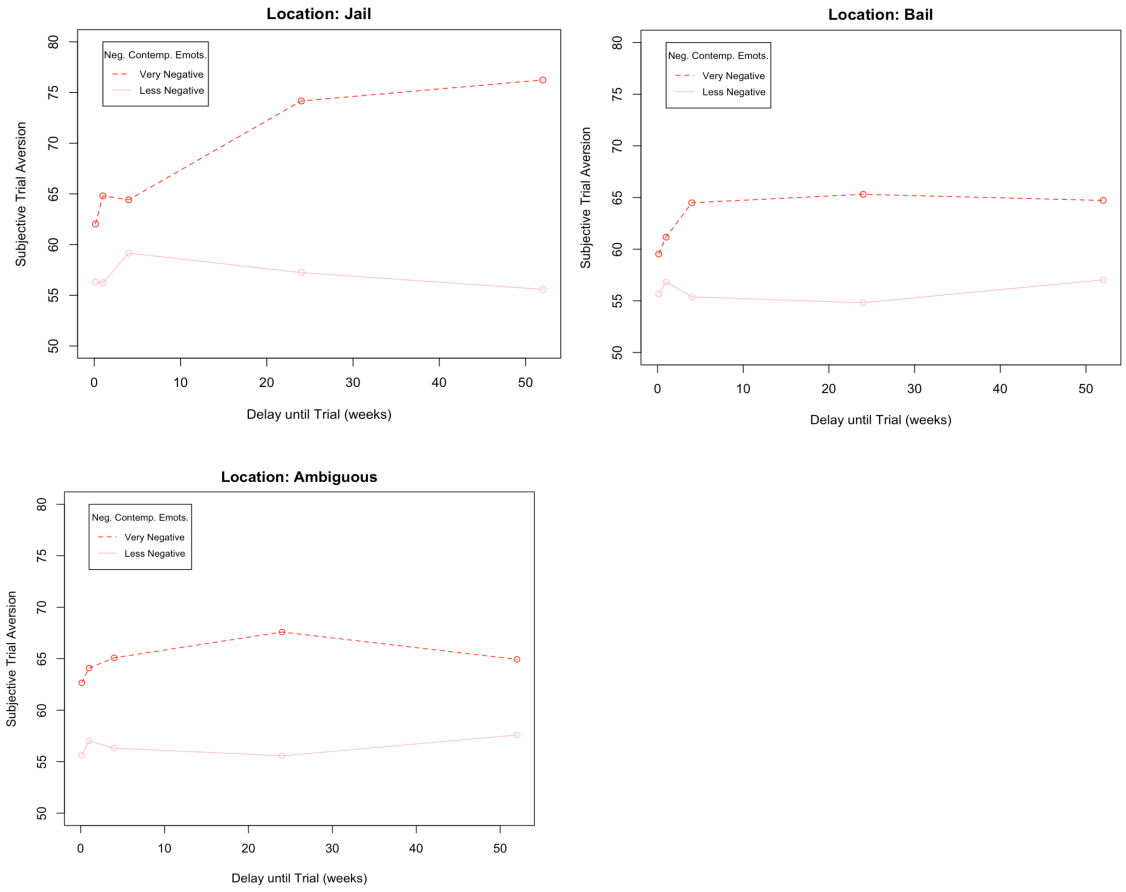
	0	1	2	3
High	10	47	42	91
Low	11	28	26	134

Delay Block 5

	0	1	2	3
High	8	42	37	103
Low	13	31	25	130

Figure 9

Study 1 NCE*DUT Interaction on Subjective Trial Aversion by Waiting-for-Trial Location Condition



Note. Figure 6 is reproduced in the left panel for direct comparison to the other conditions of Waiting-for-Trial Location.

Chapter 3: Study 2 – The Measurement of Discounting and Situational and the Person-Variable Predictors of Plea-Bargain Decision-Making

Study 2 is a methodological study with the following primary goals: (1) to determine whether methodological changes affect discounting patterns and to use a nationally representative sample to replicate (2a) Clatch and Borgida's (2021) experimental dual discounting findings and (2b) Study 1's person-by-situation findings, as well as (3) to determine whether measuring Subjective Trial Aversion can be made more efficient. Because the overarching purpose of this program of research is to examine plea bargaining from a more integrated social psychological perspective, which requires measuring a variety of variables, extending the length of the survey, it raises practical concerns about survey length and participant focus. Thus Study 2 assess whether Subjective Trial Aversion scores can be measured by fewer than five questions per delay-probability combination, as done in Study 1.

To determine whether certain methodological changes affect discounting patterns, Study 2 will vary two specific methodological features. First, Study 2 will manipulate probability within participants rather than between participants. Second, Study 2 will test three methods of measuring Subjective Trial Aversion scores. I was interested in making these methodological changes for both theoretical and practical reasons. Theoretically, testing these methodological changes allows for better comparison to past discounting studies. Practically, manipulating Probability and Delay variables within-participants allows for new between-participants variables to be manipulated without drastically increasing the requisite sample size, and manipulating the method of measuring participant Subjective Trial Aversion scores allows for the potential of more quickly (but still accurately) measuring participant Subjective Trial Aversion scores.

As described in Chapter 1, the past dual discounting studies (Vanderveldt et al., 2015; Cox & Dallery, 2016), which used monetary commodities, varied Probability and Delay within-participants, whereas Study 1 (data from Clatch & Borgida, 2021, Study 3) varies Probability between-participants and Delay within-participants. *Thus, to close the methodological gap between the monetary discounting literature and past plea-bargaining discounting research,* Study 2 will vary both variables within-participants. A benefit of this methodological change, other than being more closely tied to past dual discounting literature, is that when trait-level individual differences are expected to interact with both Probability and Delay, parallel conclusions about the process of plea-bargain decision making can be made with equal confidence.

Clatch and Borgida's (2021) studies 2 and 3 showed that as probability of trial conviction increased, participants accepted more pleas, and as delay until trial increased, participants accepted more pleas. In addition to confirming the statistical significance and direction of these Study 2 main effects, Study 3's results explained Study 2's null Delay-by-Probability interaction, which was significant in monetary dual discounting studies (Cox & Dallery, 2016; Vanderveldt, et al. 2015), by manipulating the situational feature of Waiting-for-Trial Location. This manipulation revealed that the interactive effect of Delay and Probability, seen in monetary contexts, only existed when participants waited for trial in jail, as opposed to waiting for trial while out on bail. The present study anticipates that these patterns of delay and probability discounting will not differ from these previous studies, which manipulated Probability of Trial Conviction between participants, when both Probability and Delay are manipulated within participants. Accordingly, the following was hypothesized:

H2a. *A significant Probability*Delay interaction should only appear in the Jail condition (i.e., not Bail condition), and the direction of probability and delay effects should be consistent with those found by Clatch and Borgida (2021).*

Also, Study 2 and 3 of Clatch and Borgida (2021) showed analogous results despite going from an ordinal to a continuous measurement of criminal sanctions. The consistency existed despite the transition of measuring Subjective Trial Aversion as an ordinal outcome variable in Study 2 involving jail time, probation time, and/or community service to measuring Subjective Trial Aversion as a continuous outcome variable in Study 3. Thus, the following was hypothesized:

H2b. *The three Subjective Trial Aversion measurement procedures tested in Study 2 will not have significantly different effects on Subjective Trial Aversion scores.*

To replicate Study 1's person-by-situation findings, all of Study 1's hypotheses are adopted in Study 2, except that ***H1f*** is modified as follows to predict the particular interaction effect found in Study 1: *Participants' level of Impulsivity will interact with Probability of Trial Conviction, such that less impulsive participants will be especially sensitive to Probability, whereas highly impulsive participants will be less sensitive to Probability of Trial Conviction.*

Method

Participants

Participants were recruited on the Lucid Fulcrum Exchange and received compensation from Lucid for their participation. The Lucid Fulcrum Exchange is a source of online convenience samples and is an increasingly-used alternative to Amazon Mechanical Turk. Coppock and McClellan (2019) verified that demographic and experimental findings produced using Lucid samples track well with benchmarks. The

final sample (N = 415) was nationally representative based on gender, age, race, and ethnicity.[23] The final sample consisted of 51.08 % (n = 212) women and 48.92 % (n = 203) men and had a mean age of 45.45 (SD = 17.02). The dataset consists of 67.71% self-identifying White participants (n = 281), 14.22% (n = 59) Black participants, 5.54% (n = 23) Asian participants, 1.2% (n = 5) Native Hawaiian or Pacific Islander participants, 0.7% (n = 3) Native American, and 10.6% (n = 44) multi-racial or other racial identity. Seventy-eight (18.80%) participants self-identified as Hispanic, with 337 (81.2%) identifying as Non-Hispanic.

Eighty-eight (21.20%) participants completed High school only, 77 (18.55%) completed Some College only, 151 (36.39%) graduated from college only, and 99 (23.86%) completed a Graduate degree. In terms of political affiliation, 169 (40.72%) participants were Democrats, 68 (16.39%) were Independents, 148 (35.66%) were Republicans, and 30 (7.23%) either left the question blank or selected "prefer not to answer."

Design

This study employed a 3 (Measurement Procedure) x 2 (Waiting-for-Trial Location) x 4 (Probability of Trial Conviction) x 5 (Delay until Trial) mixed-factor design with 2 between-participants variables: Measurement Procedure with three levels

[23] Lucid utilizes the United States Census Bureau's estimates for age, gender, race, and ethnicity categories of the United States population up to the year 2019. Using those estimates the following quotas were entered into Qualtrics: 18-24 aged people (13%), 25-34 aged people (18%), 35-44 aged people (18%), 45-54 aged people (19%), 55-64 aged people (16%), over-65 aged people (17%); men (49%), women (51%); White-only (72%), Black/African American only (13%), Asian only (5%), Native American (1%), Other, including Native Hawaiian and people self-identifying with more than one race category (9%); and Hispanic (18%), Non-Hispanic (82%).

(Original Titration vs. Wider Titration vs. Slider) and Waiting-for-Trial Location with two levels (Jail, Bail). As in Study 1, the Jail and Bail conditions contained language in the vignette describing explicitly where participants were physically located (see SM 5 for the manipulation language used). The two within-participants variables were Probability of Trial Conviction with four levels (5%, 50%, 95%, 99%) and Delay until Trial with five levels (1 day, 1 week, 1 month, 6 months, 1 year).

Measurement Procedure and Waiting-for-Trial Location were fully crossed, and participants were randomly assigned to one of the six conditions. Each participant was presented with all five levels of Delay until Trial, which were presented in random order to reduce the chance of order effects. Each participant received all four levels of Probability of Trial Conviction, and the blocks were shown in ascending order such that participants first proceeded through the series of five 5%-Probability-of-Trial-Conviction decision trees (one for each of the five Delays), then the series of five 50%-Probability-of-Trial-Conviction decision trees (one for each of the five Delays), and so on.

As in Study 1, the key outcome variable in this study is *Subjective Trial Aversion*. For the Original Titration condition of the Measurement Procedure variable, Figure 10 shows the Subjective Trial Aversion score at each tipping point; for the Wider Titration conditions, Figure 11 shows the Subjective Trial Aversion score at each tipping point; and for the Slider Only conditions, the Subjective Trial Aversion score is directly entered by participants using a slider bar ranging from 0 to 120 (see SM 15). As described in the two previous chapters, the titration procedures involve a series of binary-forced choice questions to isolate a participant's Subjective Trial Aversion score. The Slider, on the other hand, asks a single question with a continuous response option. The Original

Titration procedure is associated with the most restricted range (32 to 88 days in jail), whereas the Wider Titration procedure has a range of 1 to 119 days in jail, and the Slider procedure is associated with a range of 0 to 120. The Wider and Slider procedures enable me to test the possibility of artificial range restriction in the Original Titration's Subjective Trial Aversion scores (as published by Clatch & Borgida, 2021), especially at high Probabilities of Trial Conviction, since any realistic range of time in jail does not go below 0 days, can be seen in Figures 1 and 2.

There is currently no feasible way to calculate standard effect sizes for individual model terms such as main effects and interactions in mixed effects models because of the way variance is partitioned in mixed models (Rights & Sterba, 2019). As a best approximation, G*Power was used based on a repeated measures ANOVA with 1 between-participants variable and 1 within-participants variable interacted. Given an effect size *f* of .1 (taken from Clatch & Borgida, Study 3, 2021, highest order interaction model term, i.e., Delay*Probability*Waiting-for-Trial Location), an alpha of .05, power of .8, number of between-participants conditions equal to 6, number of within-participants measurements equal to 5 (i.e., Delay with largest number of levels of the two within-participants variables), a correlation among the repeated measures of .03 (calculated based on Clatch & Borgida, Study 3, 2021, correlation of Subjective Trial Aversion scores based on Delay's level), and nonsphericity correction equal to 1, the total sample size required is 414 (see SM 16 for G*Power screenshot). In order to allow for a degree of missing data, 450 participants' data was collected.[24]

[24] To this point I had never used Lucid, so I had no personal experience with the quality of their data regarding missingness. So I rounded to 450 in case there was around 10% (about n = 40) missingness.

Materials, Measures, and Procedure

The study materials consisted of an online survey nearly identical to Study 1's survey. As in Study 1, this survey contained the same attention and data quality checks (see SM 2 for the text of the checks), a vignette/scenario (SM 3), legal decision-making questions (SM 5), individual difference measures (e.g., Impulsivity), and demographic and experience questions. The original Study 1 materials are not described again in this study. In addition to the Study 1 measures, the following measures were added to the survey: Perceptions of Innocence (SM 17), Personal Involvement (SM 18), Specific Criminal Justice System Experiences (SM 19), and Cohen et al.'s (1983) Perceived Stress Scale (SM 20).

The Blameworthiness and Innocence, Perceptions of Innocence, Open Ended, and Negative Contemplative Emotions questions were presented in random order after the series of binary, forced-choice plea-bargain questions. Then, the individual difference measures of Need for Cognitive Closure, the adapted System Justification Scale,[25] Impulsivity, and Perceived Stress Scale were presented in random order before the driving, personal involvement, criminal experience, and demographic questions.

Perceptions of Innocence

In addition to the categorical Innocence question (SM 6), which asked participants, from an objective, third-party standpoint, to report whether they were innocent or guilty, two additional questions assessed participants' perceptions of

[25] Study 2's reliabilities related to this measure were higher than Study 1's but still not ideal. The eight modified items had a reliability of $\alpha = .58$ (Study 1 it was $\alpha = .54$), and the reliability of the scale with the three additional items was $\alpha = .63$ (Study 1 it was $\alpha = .61$).

innocence. Specifically, participants were asked to rate, on a slider ranging from 0 to 100, their innocence and their guilt (see SM 17). The order of these two sliders was randomly assigned.[26] These two questions were measured to detect the possibility that there may be a difference between an objective, third-party standpoint and a participant's personal beliefs as well as the possibility that even participants who believe they are *mostly* innocent (thus making them likely to select "innocent" on the categorical measure) may also believe they are *partially* guilty. This latter possibility, if empirically detected, may explain why even studies manipulating participants' innocence/guilt find that a notable portion of innocent participants accept the plea deal (e.g., Edkins & Dervan, 2018, Study 2 found 25% of innocent participants accepted a guilty plea).

Personal Involvement

Personal involvement has a rich theoretical and empirical history in social psychology going back to Gordon Allport (1943) and William James (Thomson, Borgida, & Lavine, 2014). The set of personal involvement questions included in the Study 2 survey attempts to measure how attentive and involved participants were during the legal decision making (i.e., plea bargaining) task as well as how likely it is that the scenario's facts leading up to the crime (i.e., driving in a residential area with access to a cell phone) are representative of their lives (SM 18). Participants were asked to what extent they were engaged with, interested in, attentive to, and involved in the legal decisions they made. Then, they were asked whether they own a cell phone, how often they look at it while driving (with and without picking the phone up), how often they use voice-activation while driving, how often they use their hands to text, change music, check

[26] The slider marker started at 0.

driving directions while driving. Rather than being used as a formal predictor variable, associated with substantive hypotheses, Personal Involvement will be used as a control variable (both as a main effect and moderator; see Göckeritz et al., 2010 for similar treatment).

Specific Criminal Justice System Experiences

Additional questions were added to the survey such that if a participant responded "yes" that they have had criminal justice system experience, they were then asked whether they had ever been criminally charged or had ever made a plea-bargain decision in their own lives (SM 19).

Perceived Stress Scale

Cohen and colleagues' (1983) Perceived Stress Scale has 10 items measuring the perceptions of frequency of experienced stress in the last month (SM 20). The five-item response scale ranges from 0 (never) to 4 (very often). This variable was important to measure because these survey data were collected in December 2020 in the middle of the COVID-19 pandemic, shortly after the 2020 presidential election, during a time of civil unrest. Individuals' recent life experiences and stressors may well influence their decisions. In particular, when recent life has been stressful, individuals may respond to additional, though hypothetical, stressors (being confronted with a decision to accept a plea bargain or go to trial) differently relative to when recent life is less stressful.

Hypotheses

This section first summarizes the methodological hypotheses, then as in Study 1, details the trait-level predictors' hypotheses, the situated-person predictors' hypotheses, and the experience-based predictors' hypotheses. Again, as in Study 1, there are no

formal hypotheses for demographic characteristics or for driving and accident experience. Additionally, there are no formal hypotheses for the new measures of personal involvement and perceived stress. These variables (in addition to demographic and experience variables) are analyzed in preliminary analyses and in a later series of hierarchical regressions as control variables when all significant variables are entered into a single model to determine their relative importance in explaining plea-bargain decisions.

Methodological Hypotheses

Hypothesis 2a. *Within the Original Titration condition, which is the same procedure used by Clatch and Borgida (2021), a significant interaction between Probability of Trial Conviction and Delay until Trial should only appear in the Jail condition (i.e., not Bail condition), and the direction of probability and delay effects should be consistent with those found by Clatch and Borgida (2021).*

Hypothesis 2b. *The three Subjective Trial Aversion measurement procedures (i.e., Slider, Original Titration, and Wider Titration methods) will not have significantly different effects on Subjective Trial Aversion scores.*

Trait-Level Predictors

Need for Cognitive Closure.

Hypothesis 2c. *Consistent with Study 1's Hypothesis 1a, participants with higher NFCC scores will seize-and-freeze, evincing more "stickiness" of their first plea-trial choice (i.e., choose all "trial" or all "plea," corresponding to Subjective Trial Aversion scores of 88 or 32, see SM 4) than will participants with lower NFCC scores.*

Hypothesis 2d. *Participants with higher NFCC scores will seize-and-freeze across the Delays, evincing smaller variation in Subjective Trial Aversion scores across the Delays than will participants with lower NFCC scores.*

Adapted System Justification.

Hypothesis 2e. *Individuals with high System Justification will have lower Subjective Trial Aversion scores (i.e., be more likely to go to trail) than will individuals with low System Justification.*

Hypothesis 2f. *Participants' system justification will interact with their ordinal perceptions of Innocence to predict their plea decisions, such that participants with high System Justification who also believe they are* ***innocent*** *will have lower Subjective Trial Aversion scores (i.e., evince the most willingness to go to trial), and participants with high System Justification who also believe they are* ***guilty*** *will have higher Subjective Trial Aversion scores (i.e., evince the most willingness to accept a guilty plea).*

Impulsivity.

Hypothesis 2g. *Highly impulsive participants will prefer the uncertain/risky option, trial, evincing lower Subject Trial Aversion scores, relative to less impulsive participants.*

Hypothesis 2h. *Participants' impulsivity will interact with Probability of Trial Conviction, such that low-impulsivity participants will be especially sensitive to probability, evincing a stronger positive relation between Probability of Trial Conviction and Subjective Trial Aversion scores than will highly impulsive participants.*

Hypothesis 2i. *Participants' impulsivity will interact with Delay until Trial, such that low-impulsivity participants will be especially sensitive to the trial's delay, evincing*

a stronger positive relation between Delay until Trial and Subjective Trial Aversion scores than will more impulsive participants.

Situated-Person Predictors

Blameworthiness and Innocence.

Hypothesis 2j. *Participants experiencing more self-blame for the accident and child's injury will have higher Subjective Trial Aversion scores than will participants experiencing less self-blame.*

Hypothesis 2k. *Participants who perceive themselves to be less innocent of the crime charged will have higher Subjective Trial Aversion scores than will participants who perceive themselves to be more innocent.*

Hypothesis 2l and 2m. *Neither participants' self-blame nor their perceptions of Innocence will interact with Probability of Trial Conviction to Subjective Trial Aversion scores.* That is, blameworthiness and innocence are more accurately described as individual perceptions and beliefs developed after reading the scenario rather than influenced by the situational cue of probability of losing at trial.

Negative Contemplative Emotions.

Hypothesis 2n. *Participants with higher Negative Contemplative Emotions will have higher Subjective Trial Aversion scores than will participants with weaker negative anticipatory emotions.*

Hypothesis 2o. *Negative Contemplative Emotions will moderate the relation between Waiting-for-Trial Location and Subjective Trial Aversion scores*. Specifically, participants in the jail condition should exhibit the stronger Negative Contemplative Emotions and have the highest Subjective Trial Aversion scores because jail should make

the wait until trial especially negative to contemplate relative to considering the wait until trial while living one's life as usual (i.e., participants are out on bail).

Hypothesis 2p. *In the Jail condition, Negative Contemplative Emotions will moderate the relation between Delay until Trial and Subjective Trial Aversion scores.* Specifically, for participants in the Jail condition, their negative anticipatory emotions about trial should determine the strength of the relation between Delays and their Subjective Trial Aversion scores because waiting in jail and having negative emotions sensitizes participants to the delay spent in jail while waiting for trial.

Criminal Justice System Experience

Hypothesis 2q. *Participants with Criminal Experience will have lower Subjective Trial Aversion scores (i.e., evince more willingness to go to trial) than will their inexperienced counterparts*.

Results

Preliminary Analyses

SM 21 is a comprehensive resource that shows the exploratory relations between demographic and trait-level predictors, which are provided for background.

Subjective Trial Aversion

In the Slider condition of the Measurement Method experimental variable, Subjective Trial Aversion scores ranged from 0 to 120, whereas the Wider condition's Subjective Trial Aversion scores ranged from 1 to 119, and the Original condition's Subjective Trial Aversion scores ranged from 32 to 88. Because the Measurement Method conditions differed in their ranges of possible Subjective Trial Aversion scores,

condition-specific figures and analyses are presented below in the Hypothesized Relations section rather than as a study-wide distribution.

Accident Analyses

Table 6 shows the results of a series of simple linear regressions conducted to determine whether having ever been in a car accident or having been in a car accident within the last three months (as well as how upsetting those accidents were) influenced participants' patterns of plea-bargain decisions (i.e., Subjective Trial Aversion scores), Blameworthiness, Perceptions of Innocence, and Perceptions of Guilt. The only regression predicting Subjective Trial Aversion scores that revealed a significant effect involved having ever experienced a car accident. Specifically, participants who had ever been in an accident had significantly higher Subjective Trial Aversion scores (i.e., accepted the plea bargain and avoided trial more; $M = 68.02$, $SD = 41.89$) than did people who have not ($t(411)=2.16$, $p < .05$; $M = 62.28$, $SD = 39.09$).

Blameworthiness was significantly predicted by having been in a recent accident as well as the degree of upset that the accident caused. Specifically, participants who had a recent car accident blamed themselves significantly more ($M = 137.26$, $SD = 49.79$) than did participants who did not have a recent accident ($t(412)=2.32$, $p < .05$; $M = 108.38$, $SD = 63.78$). Additionally, the more upsetting their recent accident was, the more they blamed themselves in the hypothetical scenario presented in the current study ($B = 11.74$, $SE = 4.88$).

Perceptions of Innocence and Guilt were significantly influenced by having been in a car accident. Participants who had been in a recent car accident perceived that in the hypothetical scenario they were more innocent ($M = 80.85$, $SD = 17.66$) *and* more guilty

(M = 62.92, SD = 33.12) than did people who had not be in an accident (respectively, $t(412) = 3.42$, $p < .001$, M = 59.15, SD = 32.87; $t(412) = 2.44$, $p < .05$, $p = .06$, M = 46.52, SD = 34.16).

Demographic Analyses

Table 7 shows the results of a series of simple linear regressions conducted to determine whether various demographic features influenced participants' plea-bargain decisions (i.e., Subjective Trial Aversion scores). Age, Race,[27] Education, Political Affiliation, and Ethnicity did not significantly predict patterns of plea-bargain decisions. Gender, however, did significantly predict plea-bargain decisions. As in Study 1, Men were more likely to choose to go to trial (i.e., have lower Subjective Trial Aversion scores; M = 62.16, SD = 39.61) than Women ($t(413) = 2.08$, $p < .05$, M = 67.66, SD = 41.20).

Hypothesis Testing

Methodological Features

Replication of Clatch and Borgida's (2021) Findings. First, to test the prediction that patterns of delay and probability discounting will be robust across different methodological designs—that is, regardless of whether they are manipulated between- or within-participants—a three-way interaction among the three experimental factors (Probability of Trial Conviction, Delay until Trial, and Waiting-for-Trial Location) was run in the Original Titration condition. Table 8's left panel shows that there was no significant three-way interaction (B = -.001, SE = .0009, $p > .1$), unlike that

[27] This was true regardless whether kept all Race categories or limited it to three categories (White, Black, and Other).

shown by Clatch and Borgida (2021, Study 3). However, Table 8 shows the predicted negatively-valenced interaction in the Wider Titration condition (right panel; B = -.01, SE = .002, $p < .001$). And Figure 15 depicts delay discounting curves at each level of Probability of Trial Conviction—with Clatch and Borgida's figure (2021) in the top panel with Study 2's Original and Wider Titrations' delay discounting curves beneath.

Outcome-Variable Measurement Procedures. Counter to expectation, Measurement Method significantly affected Subjective Trial Aversion scores, such that relative to the Original Titration (M = 66.01, SD = 24.21), the Slider condition yielded significantly lower Subjective Trial Aversion scores (M = 55.39, SD = 42.34), and the Wider Titration yielded significantly higher Subjective Trial Aversion scores (M = 74.25, SD = 49.53). Table 9 shows the simple linear regression's betas and standard errors. Figure 12 shows the distributions of Subjective Trial Aversion scores by Measurement Method condition. The Slider condition's distribution of Subjective Trial Aversion scores was distinct from the two titration procedures' conditions, containing a mode at the low end of its range. The Wider condition's distribution of Subjective Trial Aversion scores, like the Original condition's, contained its primary mode at the high end of its range with a secondary mode at the low end.

To examine the impact of Measurement Method in the present experiment, a series of regressions was conducted examining the impact of Measurement Method on the other three experimental factors: Probability of Trial Conviction, Delay until Trial, and Waiting-for-Trial Location. First, three multiple regressions were conducted to determine whether Measurement Method interacted with any of the other experimental factors. Second, because the multiplicative effect of Delay and Probability is pertinent to

dual discounting theory and has been empirically demonstrated by Clatch and Borgida (2020) in the plea bargaining setting, the three-way interaction among Delay until Trial, Probability of Trial Conviction, and Measurement Method was conducted. Third, a series of simple linear regressions was conducted to determine whether any of the three experimental variables' main effect on Subjective Trial Aversion scores was different in magnitude or direction depending on the Measurement Method condition. Fourth, because Clatch and Borgida (2020) found a three-way interaction among Delay until Trial, Probability of Conviction, and Waiting-for-Trial Location, three multiple regressions were conducted, one for each measurement method, to determine whether that three-way interaction was conditioned on Measurement Method.

First, a series of multiple linear regressions was conducted to determine whether Measurement Method interacted with the other experimental factors (i.e., Probability of Trial Conviction, Delay until Trial, and Waiting-for-Trial Location). Table 10 shows that there were no significant two-way interactions between Measurement Method and the other experimental variables (i.e., Probability of Trial Conviction, Delay until Trial, and Waiting-for-Trial Location). However, there was a significant interaction between Measurement Method and Probability of Trial Conviction (Wider versus Original: B = .26, SE = .02, $p < .001$ and Slider versus Original: B = .07, SE = .02, $p < .001$). Figure 13 shows that the Wider condition's green line is steeper than the other two conditions' lines, and the Original condition's black line shows a simply linear effect whereas the other two conditions lines show a steeper increase between 95% and 99% probabilities. Both of these increases in the steepness of the Wider and Slider lines, relative to the

Original line, are quantified by statistically significant and positive beta values (B = .26 and B = .07 respectively), shown in Table 10.

Second, because the multiplicative effect of Delay and Probability is theoretically pertinent and has been empirically demonstrated by Clatch and Borgida (2021), the three-way interaction among Delay until Trial, Probability of Trial Conviction, and Measurement Method was conducted. Table 11 shows a significant three-way interaction among Delay until Trial, Probability of Trial Conviction, and the Wider Measurement Method, suggesting that the pattern of dual discounting is different in the Wider condition relative to the Original condition (B = .002, SE = .001, p < .05) and the Slider condition (B = .003, SE = .001, p < .001). Figure 14 shows the three-way interaction among the variables, but only a very subtle graphical difference could be detected between the three Measurement Methods: The Wider condition's green line is consistently steeper than the other two conditions' lines (indicating a stronger relation with probability) and its steepness changes across the graphs more than the other two conditions' lines (indicating a stronger relation with delay).

To follow up, the dataset was split into three datasets, Wider, Original, and Slider, and the multiplicative dual discounting model was conducted to see whether, in all Measurement Procedure conditions, Delay until Trial and Probability of Trial Conviction interactively predicted Subjective Trial Aversion scores—and they did. Table 12 shows that all three Measurement Method conditions contained a significant two-way interaction between Delay until Trial and Probability of Conviction (Original: B = -.0026, SE = .0004, p < .001, Wider: B = -.0045, SE = .0008, p < .001, and Slider: B = -.0013, SE

= .0007, $p < .05$). The titration procedures have much larger semi-partial correlation coefficients for the interaction term ($r = .01$) relative to the Slider procedure ($r = .001$).

Third, to determine whether any of the three experimental variables' influence on Subjective Trial Aversion scores was different in magnitude or direction, a series of three simple linear regressions (i.e., one for each experimental factor: Delay, Probability, and Location) was done using each of the three subsets of data. Table 13 shows the positive and significant relations between Probability and Trial Conviction and Delay until Trial on Subjective Trial Aversion scores across all three subsets and the nonsignificant relations between Location and Subjective Trial Aversion scores across all three subsets. None of the effects differ in significance or direction based on the data subset (i.e., Measurement Method condition).

Fourth, and last, three multiple regressions, one for each Measurement Method condition data subset, were conducted to determine whether the predicted three-way interaction shown by Clatch and Borgida (2021, Study 3), who used the Original titration procedure, was conditioned on measurement method. Table 8's lowest row shows that the Wider Titration condition was the only one that showed the three-way interaction among Delay until Trial, Probability of Conviction, and Waiting-for-Trial Location ($B = -.01$, $SE = .002$, $p < .001$). Figure 15 shows the results graphically, compared to Clatch and Borgida's (2021) Study 3, which used the Original Titration procedure. Figure 15 depicts that patterns of responses varied based on Measurement Method (in the lower panel) and the Original Titration condition produced a similar pattern as Clatch and Borgida (2021).

In the following Hypothesis-Testing analyses, when Probability of Trial Conviction is in the model, one regression was conducted without Measurement Method

and another regression was conducted with Measurement Method to determine whether the results were consistent across Measurement Method conditions.

Trait-Level Predictors

Need for Cognitive Closure. First, Study 1's Hypothesis 1a was re-tested using Study 2's data.[28] The range of each participant's five Subjective Trial Aversion scores was calculated (i.e., across their five total Subjective Trial Aversion scores, one for each Delay). Counter to the hypothesis, and counter to what was found in Study 1 (see Table 3), NFCC scores did not predict Subjective Trial Aversion scores (B = -.01, SE = .16, p > .1; see more statistical details in Table 14). In Study 1's Discussion it was suggested that people with higher NFCC scores may anchor on the first decision's (in every decision tree) criminal sanction of "60 days" as a referent, causing them to change their decision, from a plea to trial or vice versa, at the first opportunity.

To assess this, SM 24 shows 12 of the 40 distributions of the two Titration conditions' Probability-by-Delay decision trees. Of note, first, is that both Original and Wider decision trees' distributions are bi-modal with the vast majority of participants always choosing "plea" or always choosing "trial" (see Figure 12). But SM 24 also highlights that the third most common pattern of responses is that participants flipped at the first opportunity—that is, they accepted a plea then chose trial or chose trial then accepted a plea.

[28] Dependent variables "Seize" and "SV range" were both used in Study 1. SV range has all the empirical information, and more, that Seize does because a participant who seized would have a SV range of 0 but a participant who did not Seize could have a variety of non-zero SV ranges. Thus, I simply tested SV range in Study 2 rather than both Seize and SV range.

Based on these descriptive observations, to test the prediction presented in Study 1's Discussion, a dependent variable "First Flip Count" was created indicating the number of decision tress (out of the 20 Probability*Delay possible decision trees) in which participants changed their plea decision at the first opportunity (i.e., in their second decision in each decision tree). Table 14 shows a significant relation between NFCC scores and First Flip Count, but in the direction opposite to what was predicted: people higher in NFCC had fewer First Flips than did people lower in NFCC (B = -.05, SE = .02, $p < .05$).

In order to explain this counter-intuitive result, four new dependent variables were created: Count of All-Trial Trees, Count of All-Plea Trees, Count of Mixed Trees, and Count of Unique Decision Sequences. Count of All-Trial Trees is the total number of decision trees (out of 20 decision trees)[29] in which each participant selected only trial. Count of All-Plea Trees is the inverse of Count of All-Trial Trees,[30] and Count of Mixed Trees is the total number of decision trees (out of 20 decision trees) in which each participant selected a mixed of plea and trial decisions. Count of Unique Decision Sequences measures the number of unique sequences each participant had across the 20 decision trees (e.g., T-T-T-P vs. T-T-P-T in Original Titration).

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[29] Accordingly, this analysis was run in the Original and Wider conditions of Measurement Method, because the Slider condition only had one decision per Probability by Delay and no true "flip" point.

[30] Note that Count of All-Trial Trees and Count of All-Plea Trees is similar, but more fine-grained and liberal than Study 1's Seize dependent measure that categorized participants as "seizing" if every single decision they made was to go to trial or every single decision they made was to accept the plea. The new dependent variables measure more behavior because there were some participants who used an all-trial strategy in some but not all decision trees, for example.

Table 14 also shows the simple linear regression results of NFCC predicting the first three outcome variables, suggesting that people higher in NFCC had more All-Plea Trees (i.e., a series of plea decisions in a decision tree; $B = .10$, $SE = .03$, $p < .01$) and fewer Mixed-Decision Trees ($B = -.08$, $SE = .03$, $p < .05$), but there was no difference in All-Trial Trees based on participant NFCC scores ($B = -.03$, $SE = .02$, $p > .1$).

Adapted System Justification Scale. A multiple linear regression was conducted to test if System Justification scores interact with Innocence Perceptions to predict Subjective Trial Aversion scores, and a simple linear regression was conducted to test whether higher System Justification predicts lower Subjective Trial Aversion scores (i.e., more likely to choose to go to trial). Null results were obtained for both analyses (see Table 15).

Impulsivity. First, as shown in Table 15, a simple linear regression did not confirm Hypothesis 2g's expectation (confirmed in Study 1, Hypothesis 1e) that higher Impulsivity scores would predict lower Subjective Trial Aversion scores. Second, however, a multiple linear regression confirmed the predicted Impulsivity * Probability of Trial interactive effect on Subjective Trial Aversion scores ($B = -.02$, $SE = .02$, $p < .001$).[31] Figure 16 shows a graph of the full dataset's Impulsivity * Probability of Trial interactive effect, with the low-impulsivity group's line being steeper than the high-impulsivity group's line.

[31] Because Probability of Trial Conviction was seen previously to interact with Measurement Method, three additional multiple regressions were run based on the three conditions' data subsets: Original, Wider, and Slider. Consistent with the all-data analysis, all three Measurement Method conditions showed negative and significant interaction terms (see SM 25 for betas and associated statistics).

Third, as shown in Table 15, a multiple linear regression did not confirm Hypothesis 2h's predicted Impulsivity * Delay until Trial interactive effect on Subjective Trial Aversion scores. In order to understand this null result, a follow-up multiple regression was conducted using only the Location-Jail data, given that the effect of Delay on Subjective Trial Aversion scores is descriptively larger in Jail conditions. Table 15 shows the significant relation, in the Jail data subset, between Impulsivity and Delay until Trial on Subjective Trial Aversion scores (B = -.02, SE = .01, p < .01). Figure 17's top panel shows the null interaction found using the full dataset, depicted by two very similar lines for High and Low Impulsivity, and the bottom-left panel shows the expected significant interactive effect between Impulsivity and Delay until Trial on Subjective Trial Aversion scores in the Jail data.

Perceived Stress Scale. Table 15 shows the nonsignificant effect of Perceived Stress on Subjective Trial Aversion scores.

Situated-Person Predictors

Blameworthiness and Innocence. Table 15 shows the results of the simple and multiple regressions conducted for these variables on Subjective Trial Aversion scores. First, a simple linear regression confirmed that higher Blameworthiness scores predict higher Subjective Trial Aversion scores (B = .13, SE = .02, p < .001). Additionally, consistent with Study 1's results (but counter to Study 1 and Study 2's hypotheses—Hypothesis 1j and Hypothesis 2l) a multiple linear regression showed that Blameworthiness and Probability of Trial Conviction interacted to predict Subjective

Trial Aversion scores (B = .0003, SE = .0001, p < .05),[32] such that in Figure 18, one can see a slight difference in line steepness at high probabilities.

Second, to test Hypothesis 2k, a series of simple linear regressions was conducted using the various measurements of Perceptions of Innocence and Guilt.[33] Regardless of the operationalization of Perceptions of Innocence, the hypothesis was confirmed. For example, participants who perceived themselves to be guilty on the categorical measure had higher Subjective Trial Aversion scores compared to participants who perceived themselves to be innocent (B = 15.62, SE = 3.58, p < .001; see Table 15). Table 15 also shows analogous results for the Perception of Innocence slider, the Perception of Guilty slider, and an ordinal recoding of the categorical Perception of Innocence variable.

Additionally, a multiple linear regression performed to test Hypothesis 2m resulted in an unexpected significant interaction between Innocence and Probability of Trial Conviction (B = -.04, SE = .01, p < .001). However, the follow-up multiple regressions conducted to determine whether Measurement Method influenced the interactive effect (see SM 25) revealed that the two titration procedures' conditions had a nonsignificant interactive effect (as expected in Hypothesis 2m and consistent with Study 1's findings using the original titration procedure). The significant interaction seen in the full dataset was caused by the significant interaction between the two variables in the

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[32] Because Probability of Trial Conviction was seen to interact with Measurement Method, three additional multiple regressions were run based on the three conditions' data subsets: Original, Wider, and Slider (see SM 25 for regression statistics; see SM 26 for the associated figures).

[33] This includes categorical and ordinal operationalizations, which were also measured in Study 1, and continuous operationalizations of both Innocence and Guilt that are new to Study 2.

Slider condition (B = -.09, SE = .02, p < .001).[34] See SM 25 for all other betas and standard errors.

Negative Contemplative Emotions. First, a simple linear regression, conducted to test Hypothesis 2n, did not confirm Study 1's finding of a significant positive relation between Negative Contemplative Emotions and Subjective Trial Aversion scores (B = -.01, SE = .02, p > .1). Second, like Study 1, a multiple linear regression did not confirm the expected interaction term between Negative Contemplative Emotions and Waiting-for-Trial Location (B = -.05, SE = .03, p > .1). Third, unlike Study 1, using a subset of the data (Jail condition only), the multiple linear regression only marginally confirmed the interaction between Negative Contemplative Emotions and Delay until Trial in predicting Subjective Trial Aversion scores (B = -.05, SE = .03, p = .09). All of this variable's regression statistics can be seen together in Table 15 for reference.

Criminal Justice System Experience

Table 15 shows that neither personal criminal experience alone nor criminal experience of someone close to participants predicted Subjective Trial Aversion scores. SM 27 shows the joint distribution of personal criminal-justice-system experience and criminal-justice-system experience of someone close to participants, and the two variables were significantly related ($\chi^2(1) = 49.52$, p < .001). So, a binary variable (Any Criminal Experience) was created, and the simple linear regression conducted on that variable revealed a marginally significant relation between Criminal Experience and Subjective Trial Aversion scores (B = -8.39, SE = 4.51, p = .07; see Table 15), suggesting

[34] Figure 20 contains figures for the all-data interaction as well as the Measurement-Method specific interactions, and will be discussed in Study 2's discussion.

that participants with criminal-justice-system experience reported lower Subjective Trial Aversion scores.

Cross-Construct Modeling

Like the findings reported by Clatch and Borgida (2021) and presented in Study 1, multiple regressions with experimental and non-experimental Person (and Situated Person) variables were conducted to test whether the effects of Person variables account for variance in plea-bargain decisions above and beyond experimental variables.[35] Thus, the preliminary step was to enter experimental variables (Probability of Trial Conviction, Delay until Trial, Waiting for Trial Location, and Measurement Method) into a model predicting Subjective Trial Aversion scores (see Model 1 in SM 28).[36] Next, in Model 2, the demographic variable of Gender was entered into the model. Model 2 was significantly better than Model 1 ($\chi^2(1) = 4.67$, $p < .05$; Model 1's AIC was 79212 and Model 2's AIC was 79209). Model 2's betas and standard errors can be seen in Table 16.

Next, in Model 3, the controls of Personal Involvement and Behavioral Personal Involvement were entered into Model 2.[37] Models 2 and 3 did not differ in their predictive utility ($\chi^2(2) = 0.52$, $p = .77$); Model 3's AIC was 79213, making it higher than Model 2's AIC, and neither Personal Involvement nor Behavioral Personal Involvement were significant, so they were left out in the next model. Model 3's betas and standard errors can be found in SM 29.

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[35] Again, to reduce the tables referenced in this section, the statistical information for any steps in the hierarchical regressions conducted that did *not* produce a significant improvement in the model were placed in supplemental materials.

[36] Unlike Study 1, the starting point was a multiple regression testing the four-way interaction between all four experimental factors.

[37] Perceived Stress was left out since it was nonsignificant as a main effect in previous analyses.

Next, in Model 4, the individual difference measures of Impulsivity and Need for Cognitive Closure were added to Model 2. Models 2 and 4 did not differ in their predictive utility ($\chi^2(2) = 2.67$, $p = .26$); Model 3's AIC was 79211, making it higher than Model 2's AIC, and neither Impulsivity nor Need for Cognitive Closure were significant, so they were left out moving forward. Model 4 can be found in SM 30.

Next, in Model 5, the situated-person variables of Blameworthiness and Perceived Innocence were added to Model 2. Adding these variables significantly increased the Model's predictive utility ($\chi^2(2) = 47.51$, $p < .001$; Model 2's AIC was 79209 and Model 5's AIC was 79166). Model 5's betas and standard errors can be seen in Table 17.

Discussion

Overall, Study 2 provides evidence that certain methodological features influence dual discounting outcomes, whereas others do not. Additionally, there are various Person variables that independently and/or interactively affect plea-bargain decisions and may also affect the discounting of non-monetary losses more generally. This discussion section will describe the impact of the following predictor categories' impact on Subjective Trial Aversion: (1) Methodological variables, (2) Situation variables including the experimental factors of Delay and Probability, (3) Person variables, including demographic and trait-level individual differences, and (4) Situated-Person Variables, including Blameworthiness and Perceptions of Innocence.

Methodological Variables

Study 2 directly connects the discounting of plea bargaining to the present literature on dual discounting through its within-subject manipulations of Delay and Probability as well as its use of the Wider Titration procedure (which was used by the

first dual discounting publication; Vanderveldt et al., 2015). This study contributes methodological innovations to the dual discounting literature by determining (a) whether relatively minor changes in the titration procedure—the most common measurement of discounting—significantly affects the measurement of Subjective Trial Aversion, (b) whether the polar modal categories of loss commodities are "true" subjective values or are the result of outcome variable range restriction, (c) whether titration procedures broadly are different from a single-item measure of Subjective Trial Aversion, and (d) whether the method of manipulation between- or within-participants makes a difference in the other experimental factors' effects. This latter point is discussed in the following section on Situational Variables, and the three former points are discussed in the present section on Methodological Variables.

First, the Original Titration procedure has four levels of decisions per decision tree, whereas the Wider Titration procedure has five levels of decisions per decision tree. This additional level of titration affords the Wider Titration procedure a wider range of measurement of Subjective Trial Aversion, relative to the Original Titration procedure. Table 9 shows that the Wider Titration condition's Subjective Trial Aversion scores were significantly different from the Original Titration condition's Subjective Trial Aversion scores. Differences between the Original and Wider Titration persisted regardless of whether Measurement Method was a main effect (see Table 9), a parameter in a two-way interaction with other experimental variables (see Table 10), or a parameter in a three-way interaction with other experimental variables (see Table 11). The range restriction of Subjective Trial Aversion scores, seen in Figure 12 by comparing the Wider Titration's distribution of Subjective Trial Aversion scores to the Original Titration's, may be part of

the reason for these effects. The polar modes in both titration procedures seem to suggest that the titration method of measurement, as operationalized to date by Clatch and Borgida (2021), does not capture the full range of human preference. Thus, Study 3 will utilize an even Wider Titration decision tree (see Figure 19), described further in Study 3's Method section.

Second, the Slider procedure produced a very different distribution of Subjective Trial Aversion scores (see Figure 12; also see Table 9's negative beta coefficient) such that the most common response was to choose to go to trial (rather than accept the harshest plea). Additionally, in all the models in which Original Titration and Wider Titration conditions were shown to differ, the Slider condition also differed from the two Titration conditions (see Tables 10 and 11). On the one hand, this may be because the experience of answering a Slider question may be easier for participants, making it more subject to quicker, less deliberative decisions, relative to a series of binary choices. On the other hand, being asked explicitly how much you value a commodity, relative to a series of alternative options, might trigger more deliberative decision-making relative to a series of choices that glean that value judgment incrementally. Future work could examine the length of time participants spend on the various tasks to get insight into the relative speed (a presumptive proxy of deliberativeness) of their decisions under the various measurement methods.

The Slider measure may also be a measure of criminal defendants' initial reactions to being threatened with a criminal sentence at trial, rather than their true "subjective value," and their underestimation of their own Subjective Trial Aversion (i.e., low-value mode) may be the result of all the psychological processes of setting initial

negotiation ranges (see, e.g., Galinsky & Mussweiler, 2001). Conversely, the Titration procedures by their very nature negotiate with the participant, to triangulate their indifference point, which can be understood as a negotiation tipping point (i.e., a true subjective value).

Third, the methodological method of manipulation of Probability of Trial Conviction from Study 1 to Study 2, between- to within-participants, respectively, did not have a noticeable effect on the three-way interaction of the three other experimental factors. For example, using all of the Study 2 data, SM 31 shows the significant three-way interaction among Delay until Trial, Probability of Trial Conviction, and Waiting-for-Trial Location. Additionally, although Table 8's Original Titration three-way interaction (left panel of columns) did not reach significance, all three two-way interactions were at least marginally significant, and the Wider Titration's three-way interaction was significant. This difference in the significance of the three-way interactions can be explained by the potential destabilizing effect of range restriction in the Original Titration condition.

Situation Variables

Clatch and Borgida (2021; Study 3) found a three-way interaction among Probability of Trial Conviction, Delay until Trial, and Waiting-for-Trial Location, and although this finding was not replicated by use of all the Study 2 data (regardless of Measurement Method) or by the Original Titration subset, it was confirmed by the Wider Titration subset (see Tables 7 and 17). Range restriction in the Original Titration procedure may cause the effects to be less reliable.

Figure 15 presents Clatch and Borgida's (2021) Study 3 figures in the top panel, and compared to the graphs of the Original Titration condition in Study 2 of the present dissertation, on the left of the bottom panel in Figure 15, the Jail condition does not show as much of a two-way interaction between Delay until Trial and Probability of Trial Conviction as in the Clatch and Borgida (2021) figure above. The two-way interaction of Delay until Trial and Probability of Trial Conviction in the Jail condition may be unstable because of a large degree of noise in the manipulation of Waiting-for-Trial Location. In Clatch and Borgida (2021; Study 3, which was the data source for Study 1 here) only 52% of the participants assigned to the Jail condition answered the question about where they were waiting for trial correctly, and in Study 2 there was a similar rate of 54%.

Despite this potential source of noise (i.e., error variance) in the data, the direction of effects in the Wider Titration condition are consistent with Clatch and Borgida's (2021) findings. In particular, increases in Probability of Trial Conviction result in more accepted plea bargains; increases in Delay until Trial result in more accepted plea bargains (especially in the Jail condition when Probability of Conviction is 50% or lower; see Figure 15); and waiting in jail for trial results in more accepted plea bargains. Thus, all three experimentally manipulated situational variables had a significant impact on plea-bargain decisions, consistent with dual discounting theory and past empirical findings; and this consistency in results is not just across studies but across different online sampling platforms, which also increases confidence in the reliability of the findings.

Factual Innocence

In addition to the experimentally manipulated situational variables, Study 2 also assessed the descriptive impact of the hypothetical scenario on key participant perceptions. Specifically, based on the vignette, all participants were arguably factually innocent, and yet, consistent with rates in Study 1, 94.70% (n = 393) of participants reported feeling some degree of self-blame for the car accident and/or child's injury. Additionally, 71.57% (n = 297) of participants believed that they were either guilty or somewhere in between innocent and guilty. Thus, in the context of the findings described above, Probability of Trial Conviction, Delay until Trial, and waiting in jail for trial, all push participants toward accepting more, and harsher, plea bargains *despite* factual innocence.

And when asked about their innocence and guilt using individual continuous sliding scales, 83.86% of participants felt that they were both somewhat innocent and guilty, revealing that the hypothetical scenario produced complicated, and possibly even conflicting, self-perceptions.

Person Variables

Study 2's findings regarding person variables' influence on Subjective Trial Aversion scores were mostly consistent with Study 1's findings. This section will first discuss demographic variables then trait-level individual-difference variables like Impulsivity and Need for Cognitive Closure.

Demographic Variables

First, as was the case in Study 1, participant gender influenced plea-bargain decisions, such that men were more likely to choose to go to trial. Second, unlike Study 1, participants' education levels did not influence their plea-bargain decisions. Study 1's

finding that participants in the high school category had significantly different Subjective Trial Aversion scores than the College graduates category seems unreliable and may be attributable to the small size of Study 1's High school sub-sample. The sample in Study 1 had 26 participants whose highest completed education was high school, whereas Study 2 had 88 participants in that category. Last, like Study 1, the demographic variables of Age, Race, and Political Affiliation did not predict Subjective Trial Aversion scores. Unlike the null effects of Age and Political Affiliation, the null effect of Race may be due to inadequately sized non-white groups in the nationally representative sample.

Trait-Level Individual-Difference Variables

Next, the individual-difference variable, Impulsivity, unlike Study 1, did not directly influence plea-bargain decisions; however, like Study 1, it did interactively (with one of two key experimental situational variables) influence plea-bargain decisions. Specifically, consistent with Study 1, participants with higher Impulsivity were less responsive to the situation variable of Probability of Trial Conviction than were participants with lower Impulsivity (see Figure 16). However, although, unlike Study 1, participants with higher Impulsivity were *not* less responsive to the Situation variable of Delay until Trial compared to participants with lower Impulsivity (see Figure 17's top panel), follow-up analyses confirmed the interactive relation between Impulsivity and Delay until Trial in the Jail condition (see Figure 17's bottom-left panel). This finding suggests that the situational feature of Waiting-for-Trial Location may influence the decisional expression of Impulsivity. Specifically, when participants are told they will be awaiting trial in jail—but not when they are out on bail until trial—participants with higher Impulsivity were not responsive to the Situation variable of Delay until Trial

(depicted by the flat pink line in Figure 17's bottom-left panel) and participants with lower Impulsivity were responsive to the Situation variable of Delay until Trial (depicted by the sloped purple line in Figure 17's bottom-right panel). This implies that when waiting in jail, participants with higher impulsivity were not bothered by the length of the wait in jail—they were going to trial at the same rate regardless of the length of the wait in jail. Participants with lower impulsivity, in contrast, were willing to accept more pleas to avoid the longer waits in jail for trial. In this sense, higher Impulsivity may be understood as a personal characteristic that desensitizes individuals to the situational feature of delay in a decision context that makes delay salient.

Need for Cognitive Closure, however, produced a much less consistent set of findings.[38] The positive (but counter to prediction) relation between NFCC and Subjective Trial Aversion scores' range in Study 1 was nonsignificant in this study. Additionally, Study 2's results conflict with the evidence in Study 1 that higher NFCC scores were not related to "seizing" on a particular decision (plea or trial). Specifically, participants with higher NFCC scores not only "seized" on a decision, it was a *particular* decision: Accept the plea.[39] Table 14 also shows the simple linear regression results of NFCC predicting Count of Unique Decision Sequences, demonstrating that people with higher NFCC had fewer unique patterns of decisions across the 20 decision trees (B = -.04, SE = .03, $p < .05$, see Table 14). This implies that people with higher NFCC "seized"

[38] In fact, as a main effect, in Study 1, NFCC did not predict Subjective Trial Aversion scores (see Table 14), but in Study 2, higher NFCC scores were associated with more plea bargains.

[39] This pattern of decision-making led people with more NFCC to have higher Subjective Values (B = .33, SE = .12, $p < .01$). Because of this, NFCC was entered into the multiple regressions with the other significant individual-difference measure of Impulsivity in the present study's Cross-Construct Results section.

and "froze" not only on a particular decision in a particular delay-probability combination but also varied less from that decision *between* decision trees (i.e., across the varying delay-probability combinations). And because the decision trees were different on the key experimental factors of Delay and Probability, this suggests that people with higher NFCC tended to be less influenced by Probability and/or Delay.

To test this implication, NFCC was entered into two multiple linear regressions (one with Delay until Trial and one with Probability of Trial Conviction). Table 14 shows these regressions and reveals that NFCC interacted significantly only with Probability of Trial Conviction to predict Subjective Trial Aversion scores ($B = .02$, $SE = .001$, $p < .05$). Interestingly mirroring the interactive effects of Impulsivity in this Study, these findings suggest that NFCC is expressed in this legal-decision context in terms of dealing with uncertainty (i.e., likelihood of conviction) rather than in terms confronting the delayed aspect of losses.[40] Because Impulsivity and NFCC were not correlated ($r = .06$, $p < .1$), this suggests that Impulsivity and NFCC may be independent person-level desensitizers to the situational feature of Probability.

[40] SM 33 shows the significant interaction between NFCC and Probability of Trial Conviction on Subjective Trial Aversion, depicting that participants who were more moderate (i.e., in the middle 50% of the NFCC scores' distribution) were more responsive to the increase in Probability of Trial Conviction between 5 and 50% than the participants in the outer tails of the NFCC distribution (i.e., in the lower and higher 25% of the distribution). This implies that NFCC is interacting with Probability of Trial Conviction in a non-linear way to predict Subjective Trial Aversion.

Last, consistent with Study 1, adapted System Justification did not predict Subjective Trial Aversion scores, and the new individual differences of Perceived Stress Scale and Personal Involvement did not predict plea-bargain decisions.[41]

Situated-Person Variables

Consistent with Study 1, Perceptions of Innocence and Blameworthiness predicted plea-bargain decisions such that participants who perceived themselves to be more guilty (and less innocent) were more willing to accept guilty pleas, and participants who felt more blameworthy for the accident and the child's injury were more willing to accept guilty pleas. Additionally, these two variables interacted with Probability of Trial Conviction to predict plea-bargain decisions (see Table 15 and Figures 18 and 20).[42]

Although Study 2's Original Titration Blameworthiness by Probability of Trial Conviction graph (Figure 18) does not seem consistent with Study 1's (Figure 5), Study 2's Wider Titration interaction graph in SM 26 shows that as Probability of Trial Conviction increases, the High-Blameworthiness and Low-Blameworthiness lines grow closer, consistent with Figure 5, where the lines actually touch. This suggests that as the likelihood of losing at trial increases, perceptions of blameworthiness become less important to plea-bargain decision-making.

Although Study 1 did not show the predicted Innocence by Probability of Trial Conviction interaction (Table 5), Study 2 did (Table 15). Figure 20 shows the most

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[41] Perceived Stress Scale's nonsignificant regression results can be seen in Table 15, and when entered as control variables, the two personal involvement measures' beta estimates were non-significant (see SM 30).

[42] Because Measurement Method contributed to different patterns of probability discounting, SMs 25–26 and Figure 20 show the interaction between these situated person variables and Probability of Trial Conviction for each Measurement Method.

pronounced effects, which, like many other effects, appeared in the Wider condition; and, the Wider condition's effects carried enough weight that in the full dataset, the interaction still holds (bottom-right panel compared to top panel). The interaction between Innocence and Probability of Trial Conviction indicates that people who believed themselves to be Innocent were less responsive to Probability of Trial Conviction (the less steep green line in Figure 20's top graph); people that believed themselves to be somewhere between Innocent and Guilty were most responsive to Probability of Trial Conviction (the steepest yellow line in Figure 20's top graph); and people that believed themselves to be Guilty were somewhere between in terms of responsiveness to Probability of Trial Conviction (the red line in Figure 20's top graph). This suggests that people that were less certain about their own innocence/guilt were more sensitive to the key situational cue that is a proxy for innocence/guilt: probability of being found guilty at trial.

Last, Study 2's findings regarding Negative Contemplative Emotions, participants' emotions toward the trial option, were relatively inconsistent with Study 1's findings. Despite having similar negatively skewed distributions (see SM 33), none of Study 1's NCE findings replicated in Study 2. Despite there being a main effect in Study 1 (see Table 4), there was no main effect of NCE on Subjective Trial Aversion scores in Study 2 (see Table 15). Despite there being a significant interaction in the Jail condition with Delay until Trial in Study 1 (see Table 4), no such interaction was significant in Study 2 (see Table 15). And despite there being a significant three-way interaction among NCE, Delay until Trial, and Waiting-for-Trial Location in Study 1 (see Table 4), this interaction, too, was nonsignificant in Study 2 (see Table 15).[43] Because the sliders for

[43] Table 15 contains all the NCE regressions that Table 4 does for ease of comparison.

NCE's measurement had the slider marker's starting position at 0, it is possible that anchoring effects are affecting the measurement of NCE in both Studies 1 and 2, creating the negative skew, and making the effects unreliable.

Limitations and Future Studies

Study 3 will query the possibility of range restriction of Subjective Trial Aversion scores further by, again, widening the range of the Subjective Trial Aversion scores measured, this time not by increasing the levels (i.e., decisions) in each decision tree, but by increasing the starting plea bargain offer (i.e., criminal sentence) from 60 days to 120 days in jail (see Figure 19 for the decision tree starting at 120 days), which increases the range from 118 (1, 119 day) to 234 days (3, 237 days). Because the trial offer is 240 days, Study 3 will allow for not only a wider range of Subjective Trial Aversion scores, but will allow participants to demonstrate whether a mere three-day sentence reduction is worth the certainty and immediacy of the plea bargain, or put conversely, whether the certainty and immediacy of the plea is worth essentially no reduction in criminal sentence—meaning that some people may desire certainty and immediacy so much that they will plead guilty and take on what is essentially the trial sentence.

To address the possibility of noise in manipulating Waiting-for-Trial Location, Study 3 simplifies the instructions in the materials and makes the Waiting-for-Trial Location equally salient as the Delay until Trial and Probability of Trial Conviction manipulations.

Study 3 and 4 will manipulate Factual Innocence to compare the plea-bargain decisions of Innocent participants to Guilty ones. Study 3 and 4 will also measure

perceptions of innocence and guilt to determine whether patterns in those self-perceptions change when the factual innocence is manipulated.

Study 3 and 4 will counterbalance the location of the slider marker of Negative Contemplative Emotions (at 0 for some and 100 for others) as well as the Continuous Innocence and Guilt measures through randomization.

Overall, Study 2 methodologically informs Studies 3 and 4 in two ways. First, confirming that manipulating Probability and Delay variables within-participants does not change effects allows for new between-participants variables to be manipulated without drastically increasing the requisite sample size. Second, the measurement method manipulation determined that slider items likely tap different psychological processes, and range restriction of Subjective Trial Aversion scores may cause instability in effects. Accordingly, the Wider titration measurement procedure will be used in Studies 3 and 4 to extend Subjective Trial Aversion's measured range and tap the psychological processes consistent with the bulk of discounting research. Last, Study 1 and 2 together, suggest that Situational variables, Person variables, and Situated-Person variables all influence plea-bargain decision-making, often interactively, so all of the variables that were hypothesized to predict plea-bargain decisions and found to be significant in at least one of the previous two studies will be measured again in Study 3.

Table 6

Study 2 Accident Regression Analyses

	Subjective Trial Aversion					Blame				Innocence (ordinal)			
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*	*B*	*SE*	R^2_a	*95% CI*	*B*	*SE*	R^2_a	*95% CI*
Model 1: Accident Ever			.005	.42				.005				.004	
Maybe	7.75	26.98			(-45.1, 60.56)	-105.67^m	62.70		(-228.92, 17.58)	1.12	0.75		(-.35, 2.59)
No	-5.73*	2.65			(-10.9, -.54)	-7.38	6.16		(-19.50, 4.73)	0.10	0.08		(-.05, .24)
Model 2: Accident Ever Upsetting			.0002	.42				.001				.005	
Upsetting	-0.52	1.81			(-4.05, 3.02)	4.80	4.29		(-3.66, 13.27)	-0.01	0.05		(-.11, .09)
Model 3: Accident 3-month			.002	.42				.008				.001	
Maybe	-7.72	10.00			(-27.3, 11.85)	-20.26	23.11		(-65.69, 25.17)	-0.26	0.29		(-.82, .31)
No	-6.23	5.38			(-18.8, 4.31)	-28.88*	12.44		(-53.33, -4.44)	-0.23	0.15		(-.52, .06)
Model 4: Accident 3-month Upsetting			.01	.37				.12				.01	
Upsetting	2.59	2.45			(-2.21, 7.39)	11.74*	4.88		(1.83, 21.66)	0.07	0.09		(-.12, .26)

	Innocence (continuous)				Guilt (continuous)			
Models/Variables	*B*	*SE*	R^2_a	*95% CI*	*B*	*SE*	R^2_a	*95% CI*
Model 1: Accident Ever			.0002				.002	
Maybe	40.79	32.34		(-22.79, 104.37)	-49.65	34.11		(-116.71, 17.41)
No	2.40	3.18		(-3.86, 8.64)	-2.77	3.35		(-9.36, 3.82)
Model 2: Accident Ever Upsetting			.005				.02	
Upsetting	-0.56	2.15		(-4.80, 3.67)	4.59*	2.23		(.19, 9.00)
Model 3: Accident 3-month			.02				.02	
Maybe	-20.45[m]	11.81		(-43.66, 2.76)	2.67	12.51		(-21.91, 27.26)
No	-21.70***	6.35		(-34.19, 9.21)	-16.41*	6.73		(-29.64, -3.19)
Model 4: Accident 3-month Upsetting			.21				.01	
Upsetting	6.74**	2.05		(2.58, 10.90)	2.60	3.32		(-4.14, 9.35)

Note. Models 2 and 4 only used data from participants who had reported "Yes" or "Maybe" to ever being in an accident and being in an accident in the last three months respectively because participants who responded "No" were not asked how upsetting their non-existent accident was. The reference category for Models 1 and 3 are "Yes." The "Maybe" category for ever having been in an accident only had 1 participant in it, and the "Maybe" category for having been in a recent accident only had 2 participants in it. Because Study 2 measured Perceptions of Innocence in two different ways (ordinal, like Study 1, and continuous) there are two sets of regressions for those two outcome variables.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 7

Study 2 Demographics Regression Analyses

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Age	-0.06	0.08	.001	.42	(-.21, .09)
Political Party Affiliation			.003	.40	
Independent	1.07	3.79			(-6.34, 8.47)
Prefer Not to Respond	-1.04	7.60			(-15.89, 13.82)
Republican	4.67	2.97			(-1.14, 10.47)
Race			.001	.42	
White	-1.13	3.87			(-8.71, 6.45)
Other	1.31	4.71			(-7.91, 10.52)
Race*DUT			.004	.42	
Other	1.55	4.81			(-7.86, 10.97)
White	-2.41	3.96			(-10.16, 5.34)
DUT	.05	.05			(-.04, .14)
Other:DUT	-0.02	.06			(-.13, .10)
White:DUT	0.08	0.05			(-.02, 0.18)
Race*PTC			.12	.55	
Other	-2.17	5.02	.001		(-11,99, 7.65)
White	-9.92*	4.13	.005		(-18.00, -1.85)
PTC	0.26***	0.02	.02		(.22, .31)
Other:PTC	0.06*	.03	.001		(.002,.11)
White:PTC	.14***	.02	.005		(.10, .19)
Ethnicity					
Non-Hispanic	1.15	3.40			
Education			.004	.42	
Some College	-4.65	4.21			(-12.88, 3.58)
College Graduate	0.61	3.62			(-6.45, 7.69)
Graduate School	-4.97	4.21			(-12.70, 2.76)
Gender					
Women	5.49*	2.64	.005	.42	(.32, 10.7)
Gender*PTC			0.13		
Women	1.90	2.82			(-3.62, 7.42)
PTC	0.34***	0.01	0.06		(0.32, 0.36)
Women:PTC	0.06***	0.02	0.001		(0.03, 0.09)
Gender*DUT			0.007		
Women	5.95*	2.70	0.003		(0.66, 11.24)
DUT	0.12***	0.02	0.002		(0.07, 0.17)
Women:DUT	-0.03	0.03			(-0.10, 0.04)
Gender*DUT*WTL			0.02		
Women	7.96*	3.77	0.003		(0.58, 15.34)
DUT	0.001	0.04			(-0.07, 0.08)
Jail	3.75	3.85	0.001		(-3.77, 11.28)
Women:DUT	-0.01	0.05			(-0.11, 0.08)
Women:Jail	-3.89	5.39			(-14.43, 6.64)
DUT:Jail	0.22***	0.05	0.002		(0.13, 0.32)
Women:DUT:Jail	-0.005	0.07			(-0.14, 0.13)
Part of College:DUT	-0.02	0.05			(-0.11, 0.08)

Education*PTC			0.13	
College Graduate	3.85	3.72		(-3.42, 11.12)
High School	0.14	4.21		(-8.09, 8.38)
Part of College	-9.38*	4.37	0.002	(-17.92, -0.84)
PTC	0.31***	0.02	0.02	(0.28, 0.35)
College Graduate:PTC	0.03	0.02		(-0.01, 0.07)
High School:PTC	0.08***	0.02	0.001	(0.03, 0.12)
Part of College:PTC	0.16***	0.02	0.003	(0.11, 0.20)
Education*DUT			0.01	
Graduate School	-6.58[m]	3.56	0.002	(-13.55, 0.38)
High School	-0.74	3.70		(-7.97, 6.49)
Part of College	-5.02	3.86	0.001	(-12.56, 2.53)
DUT	0.09**	0.03	0.001	(0.03, 0.15)
Graduate School:DUT	0.06	0.04		(-0.03, 0.15)
High School:DUT	0.007	0.05		(-0.08, 0.10)
Part of College:DUT	-0.02	0.05		(-0.11, 0.08)
Education*DUT*WTL			0.02	
Graduate School	-8.49[m]	5.02	0.002	(-18.26, 1.29)
High School	4.54	5.28	0.001	(-5.74, 14.82)
Part of College	-9.25[m]	5.09	0.002	(-19.16, 0.65)
DUT	-0.03	0.05		(-0.10, 0.05)
Jail	0.63	4.45		(-8.02, 9.29)
Graduate School:DUT	0.03	0.06		(-0.09, 0.16)
High School:DUT	0.07	0.07		(-0.06, 0.20)
Part of College:DUT	0.0001	0.06		(-0.13, 0.13)
Graduate School:Jail	3.66	7.07		(-10.09, 17.41)
High School:Jail	-0.03	7.34	0.001	(-24.21, 4.35)
Part of College:Jail	10.65	7.75	0.001	(-4.43, 25.73)
DUT:Jail	0.24***	0.06	0.001	(0.13, 0.35)
Graduate School:DUT:Jail	0.05	0.09		(-0.13, 0.22)
High School:DUT:Jail	-0.14	0.09		(-0.32, 0.04)
Part of College:DUT:Jail	0.01	0.10		(-0.18, 0.21)

Note. The regression using Gender as a predictor had "Men" as the reference category. The regressions using Race as a predictor had "Black" as the reference category. The regression using Education as a predictor had "High school" as the reference category.

Table 8

Study 2 Attempted Replication of Clatch and Borgida's (2021) Plea-Bargain Discounting Effects (by Measurement Method Data Subset)

	Subjective Trial Aversion											
	Original Titration				Slider				Wider Titration			
Models/Variables	B_o	SE_o	R^2_m	*95% CI*	B_s	SE_s	R^2_m	*95% CI*	B_w	SE_w	R^2_m	*95% CI*
WTL*PTC*DUT			.19				.10				.19	
Jail	-0.81	2.73		(-6.15, 4.52)	3.98	5.59		(-6.96, 14.9)	-8.81	6.14		(-20.82, 3.21)
PTC	0.28***	0.02		(.25, .32)	0.38***	0.02		(.34, .43)	0.51***	0.03		(.45, 57)
DUT	0.17***	0.05		(.07, .25)	0.08	0.07		(-.06, .21)	-0.04	0.09		(-.21, .13)
Jail:PTC	0.04[m]	0.02		(-.002, .08)	-0.05	0.03		(-.12, .02)	0.18***	0.04		(.09, .27)
Jail:DUT	0.16**	0.06		(.04, .29)	0.21*	0.10		(.02, .40)	0.96***	0.13		(.71, 1.21)
PTC:DUT	-0.002**	0.0006		(-.003, -.0006)	-0.002[m]	0.0009		(-.004, .00004)	0.00004	0.001		(-.002, .002)
Jail:PTC:DUT	-0.001	0.0009		(-.003, .0003)	0.0009	0.001		(-.002, .004)	-0.01***	0.002		(-.01, -.01)

Note. "PTC" stands for Probability of Trial Conviction; "DUT" stands for Delay until Trial; and "WTL" stands for Waiting-for-Trial Location. The subscript "o" stands for Original Titration; the subscript "s" stands for Slider; and the subscript "w" stands for Wider Titration.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 9

Study 2 Measurement Method Effect on Subjective Trial Aversion

	Subjective Trial Aversion				
Model/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Measurement Method			.04	.42	
Slider	-10.58***	3.08			(-16.59, -4.56)
Wider	8.24**	3.15			(2.08, 14.39)

Note. The Slider condition had a significantly lower average Subjective Trial Aversion than the Original titration condition, and the Wider titration condition had a significantly higher average Subjective Trial Aversion than the Original titration condition.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 10

Study 2 Measurement Method Two-Way Interactions with Other Experimental Factors

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
Measurement Method*PTC			.17	
Slider	-15.12***	3.29		(-21.56, -8.68)
Wider	-7.78*	3.36		(-14.37, -1.19)
PTC	0.26***	0.01		(.24, .29)
Slider:PTC	0.07***	0.02		(.04, .11)
Wider:PTC	0.26***	0.02		(.22, .30)
Measurement Method*DUT			.04	
Slider	-10.67***	3.15		(-16.83, -4.51)
Wider	7.69*	3.22		(1.39, 13.99)
DUT	0.09**	0.03		(.03, .15)
Slider:DUT	0.01	0.04		(-.07, .08)
Wider:DUT	0.03	0.04		(-.05, .12)
Measurement Method*WTL			.04	
Slider	-11.51**	4.35		(-19.99, -3.03)
Wider	6.06	4.39		(-2.51, 14.63)
Jail	3.00	4.33		(-5.45, 11.45)
Slider:Jail	2.12	6.14		(-9.85, 14.09)
Wider:Jail	5.08	6.29		(-7.19, 17.34)

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 11

Study 2 Three-Way Interaction of Dual Discounting and Measurement Method Condition

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
PTC*DUT*Measurement Method			.17	
PTC	.59***	0.02		(.56, .63)
DUT	0.41***	0.05		(.31, .50)
Slider	-3.68	3.56		(-.11, 3.28)
Original	10.30**	3.55		(3.36, 17.25)
PTC:DUT	-0.005***	0.0007		(-.01, -.003)
PTC:Slider	-0.24***	0.02		(-.28, -.19)
PTC:Original	-.29***	-0.02		(-.34, -.24)
DUT:Slider	-0.23**	0.07		(-.36, -.09)
DUT:Original	-0.16*	0.07		(-.29, -.02)
PTC:DUT:Slider	0.003***	0.001		(.0001, .004)
PTC:DUT:Original	0.002*	0.001		(.001, .005)

Note. The Original condition is the reference category in the top regression, and the Slider condition is the reference category in the bottom regression

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 12

Study 2's Three Data Subsets to Test Dual Discounting

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
DUT*PTC [Original]			.19	
DUT	0.25***	0.03	.02	(.19, .31)
PTC	0.31***	0.01	.16	(.28, .33)
DUT:PTC	-.0026***	0.0004	.01	(-.003, -.001)
DUT*PTC [Wider]			.17	
DUT	0.41***	0.06	.01	(.28, .53)
PTC	0.59***	0.02	.14	(.55, .64)
DUT:PTC	-.0045***	0.0008	.01	(-.006, -.003)
DUT*PTC [Slider]			.09	
DUT	0.18***	0.05	.002	(.08, .28)
PTC	0.36***	0.02	.07	(.32, .39)
DUT:PTC	-.0013*	0.0007	.001	(-.003, -.00002)

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 13

Study 2 Nine Simple Linear Regressions Testing Main Effects of Experimental Factors by Data Subset

	Subjective Trial Aversion			
Models/Datasets	*B*	*SE*	R^2_m	*95% CI*
PTC				
Original dataset	0.26***	0.01	.17	(.25, .28)
Slider dataset	0.34***	0.01	.09	(.31, .36)
Wider dataset	0.52***	0.02	.16	(.49, .56)
DUT				
Original dataset	0.09***	0.02	.006	(.05, .13)
Slider dataset	0.10***	0.03	.002	(.04, .15)
Wider dataset	0.12**	0.04	.002	(.05, .20)
WTL				
Original dataset	3.00	2.30	.004	(-1.50, 7.50)
Slider dataset	8.08	5.37	.004	(-4.85, 15.10)
Wider dataset	5.12	5.09	.007	(-2.43, 18.6)

Note. "PTC" stands for Probability of Trial Conviction; "DUT" stands for Delay until Trial; and "WTL" stands for Waiting-for-Trial Location. The reference category for the WTL regressions was "Bail," so the beta estimates in the WTL regressions were for the Jail condition.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 14

Study 2 Need for Cognitive Closure Analyses

Models/Variables	*B*	*SE*	$R^2_{a[m]}$	95% *CI*
STA_range ~ NFCC	-0.01	0.16	.002	(-.32, .31)
First Flip Count ~ NFCC	-0.05*	0.02	.01	(-.09, -.003)
Count of All Trial Trees ~ NFCC	-0.03	0.02	.0003	(-.07, .02)
Count of All Plea Trees ~ NFCC	0.10**	0.03	.03	(.04, .17)
Count of All Mixed Trees ~ NFCC	-0.08*	0.03	.02	(-.14, -.02)
Unique Seq Count ~ NFCC	-0.04*	0.03	.02	(-.08, -.01)
STA ~ NFCC*Delay			[.01]	
NFCC	0.33*	0.13	.006	.08, .57
Delay	1.06	1.18		-1.26, 3.38
NFCC:Delay	.00008	0.02		-.04, .04
STA ~ NFCC*PTC			[.16]	
NFCC	32.54	8.58	.001	-.05, .47
PTC	0.21***	0.13	.003	.16, .38
NFCC:PTC	0.02*	0.001	.001	.0002, .003
STA Average ~ NFCC	0.33**	0.12	.02	(.05, -.02)

Note. Because this table contains both simple linear regressions and mixed method multiple regressions, $^{R}2$ adjusted is provided for the simple linear regressions and R^2 marginal is provided for the mixed method multiple regressions with semi-partial correlations for individual parameters of the multiple regressions provided when they are greater than or equal to .001.

[m].05 ≤ *p* ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 15

Study 2 Hypothesized Relation Regressions

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
Blameworthiness	0.13***	0.02	.04	(.09, .17)
Blame*PTC			.16	
PTC	0.34***	0.02	.03	(.30, .37)
Blameworthiness	0.11***	0.02	.01	(.07, .16)
PTC:Blame	.0003*	0.0001		(.0001, .001)
Innocence_Categ			.02	
Between	12.21***	3.35	.01	(5.67, 18.8)
Guilty	15.62***	3.58	.02	(8.62, 22.6)
Don't know	10.59	6.96	.003	(-3.01, 24.2)
Innocence Slider	-0.15**	0.05	.03	(-.31, -.16)
Guilt Slider	0.12*	0.04	.03	(.14, .29)
Innocence_Ordin	-7.58***	1.78	.02	(-11.1, -4.1)
Innocence_Ordin*PTC			.14	
PTC	0.41***	0.01	.08	(-8.88, -1.43)
Innocence	-5.15**	1.90	.006	(.38, .43)
PTC:Innocence	-0.04***	0.01	.003	(-.06, -.02)
NCE	-0.01	0.02	.001	(-.04, .02_
NCE*WTL			.007	
NCE	0.01	0.02		(-.03, .05)
Jail	1.53	3.53		(-5.37, 8.43)
NCE:Jail	-0.05	0.03	.003	(-.1, .01)
NCE*DUT [Jail only]			.02	
NCE	-0.27	0.02	.002	(-.07, .01)
DUT	17.95***	3.32	.005	(1.14, 2.45)
NCE:DUT	-0.05^m	0.03		(-.01, .001)
NCE*DUT [All Locations]			.003	
NCE	-0.01	0.02		(-.04, .02)
DUT	94.07***	22.83	.001	(49.32, 138.84)
NCE:DUT	-0.12	0.19		(-.49, .26)
NCE*DUT*WTL [All Locations]			.01	
NCE	0.01***	0.02		(-.03, .05)
DUT	8.97	31.76		(-53.28, 71.22)
Jail	-1.24	3.61		(-8.29, 5.81)
NCE:Jail	-0.02	0.03	.001	(-.09, .03)
NCE:DUT	0.19	0.26		(-.33, .71)
DUT:Jail	170.52***	45.57	.001	(81.22, 259.82)
NCE:DUT:Jail	-0.67^m	0.38		(-1.42, .08)
PSS	0.17	0.24	.0005	(-.30, .64)
ASJS	0.02	0.12	.00002	(-.22, .25)
ASJS*Innoc_Ordin			.02	
ASJS	-0.02	0.19		(-.38, .35)
Innocence	-8.12	8.90	.001	(-25.52, 9.28)
ASJS:Innocence	0.01	0.15		(-.29, .30)
Impulsivity	-0.10	0.28	.0001	(-.66, .45)
Impulsivity*PTC			.13	
Imp	1.15***	0.30	.006	(.56, 1.74)
PTC	0.49***	0.01	.08	(.47, .52)
Imp:PTC	-0.02***	0.02	.009	(-.02, -.01)

Impulsivity*DUT [All Locations]			.003	
Imp	-0.034	0.29		(-.60, .53)
DUT	12.97**	2.87	.001	(7.35, 18.59)
Imp:DUT	-0.42	0.36		(-1.14, .30)
Impulsivity*DUT [Jail Only]			.02	
Impulsivity	-0.24	0.39		(-1.00, .52)
DUT	0.33***	0.04	.001	(.24, .41)
Imp:DUT	-0.02**	0.01		(-.03, -.01)
Impulsivity*DUT*WTL			0.01	
Impulsivity	0.16	0.40		(-0.64, 0.95)
DUT	-0.05	0.04		(-0.13, 0.03)
Jail	3.94	4.54	0.001	(-4.93, 12.81)
Impulsivity:DUT	0.01	0.01		(-0.003, 0.02)
Impulsivity:Jail	-0.39	0.58		(-1.52, 0.73)
DUT:Jail	0.38***	0.06	0.003	(0.27, 0.49)
Impulsivity:DUT:Jail	-0.02***	0.01	0.001	(-0.04, -0.01)
Criminal Experience (Own)	-3.81	3.03	.002	(-9.74, 2.12)
Criminal Experience (Other)	-2.29	2.83	.0007	(-7.83, 3.25)
Criminal Experience (Categorical)			.005	
Other Only	-4.47	3.65	.002	(-11.60, 2.66)
Own Only	-8.39[m]	4.51	.007	(-17.21, .44)
Both	-2.55	3.78	.002	(-9.93, 4.83)

Note. No matter how the Innocence variable was measured, categorical (Innocent, Guilt, In Between, I don't know), ordinal (Innocent, somewhere in between, guilt), or on a continuous scale from 0-100, Perceptions of Innocence and Guilt influenced Subjective Trial Aversion.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 16

Study 2 Cross-Construct Multiple Regression Model 2

	Subjective Trial Aversion				
Model/Variables	*B*	*SE*	R^2_m	*95% CI*	R^2_c
Model 2			.19		.57
PTC	0.28***	0.02	.009	(.24, .33)	
DUT	0.17*	0.07		(.03, .30)	
Jail	-0.81	4.88		(-10.9, 8.10)	
Slider	-16.34***	4.90	.003	(-27, -7.84)	
Wider	-6.65	4.95	.001	(-17.10, 2.16)	
PTC:DUT	-0.002[m]	0.001		(-.01, .00001)	
PTC:Jail	-0.04	0.03		(-.02, .11)	
DUT:Jail	0.16[m]	0.10		(-.02, .35)	
PTC:Slider	0.10**	0.03	.001	(.03, .17)	
PTC:Wider	0.23***	0.03	.003	(.16, .29)	
DUT:Slider	-0.09	0.10		(-.28, .10)	
DUT:Wider	-0.20*	0.10		(-.40, -.01)	
Jail:Slider	4.79	6.92		(-6.92, 20.20)	
Jail:Wider	-7.99	7.09		(-21.00, 6.59)	
PTC:DUT:Jail	-0.001	0.001		(-.004, .001)	
PTC:DUT:Slider	0.0001	0.001		(-.003, .003)	
PTC:DUT:Wider	0.002	0.01		(-.001, .004)	
PTC:Jail:Slider	-0.09[m]	.05		(-.19, .001)	
PTC:Jail:Wider	0.15**	0.05	.001	(.05, .02)	
DUT:Jail:Slider	0.04	0.14		(-.22, .31)	
DUT:Jail:Wider	0.79***	0.14	.002	(.52, 1.06)	
PTC:DUT:Jail:Slider	0.002	0.002		(-.001, .006)	
PTC:DUT:Jail:Wider	-0.008***	0.002	.001	(-.01, -.004)	
Gender	5.51*	2.57	.006	(.51, 10.50)	

Note. R^2 marginal is provided for this mixed method multiple regression with semi-partial correlations in the same column for individual parameters when they are greater than or equal to .001.

[m].05 ≤ *p* ≤ .1. *p < .05. **p < .01. ***p < .001

Table 17

Study 2 Cross-Construct Multiple Regression Model 5

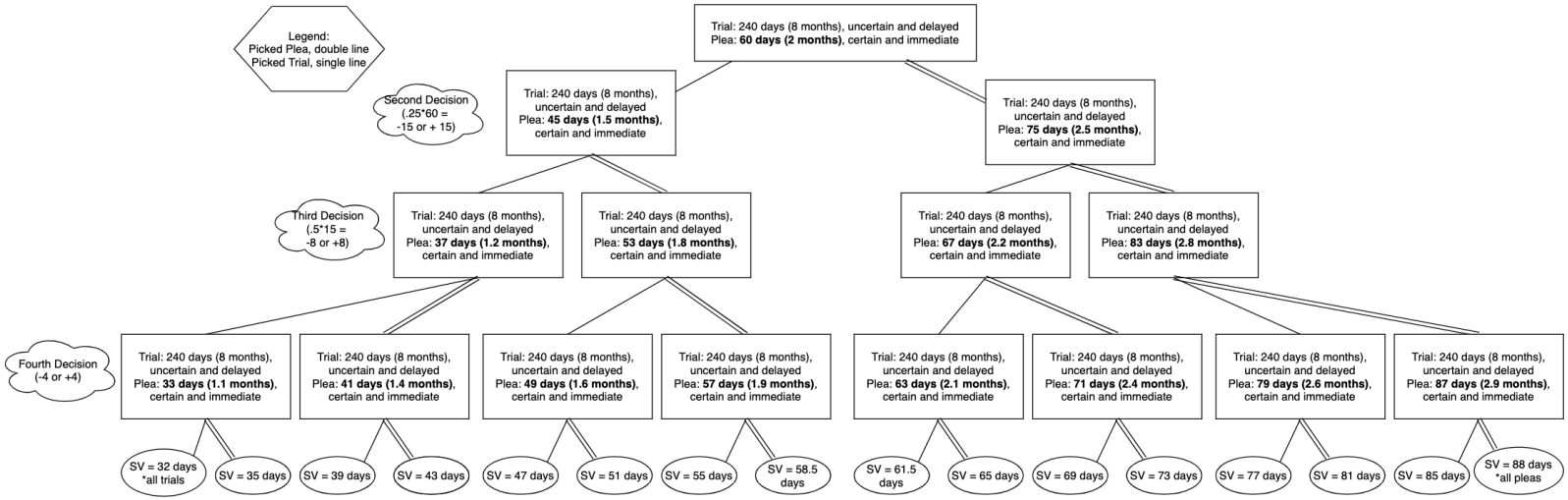
	Subjective Trial Aversion				
Model/Variables	*B*	*SE*	R^2_m	*95% CI*	R^2_c
Model 5			.23		.57
PTC	0.28***	0.02	.01	(.24, .33)	
DUT	0.17*	0.07		(.03, .30)	
Jail	-0.81	4.88		(-9.67, 8.54)	
Slider	-16.34***	4.90	.003	(-26.4, -8.07)	
Wider	-6.65	4.95		(-15.8, 2.74)	
PTC:DUT	-0.002[m]	0.00		(-.01, .00001)	
PTC:Jail	-0.04	0.03		(-.02, .11)	
DUT:Jail	0.16[m]	0.10		(-.02, .35)	
PTC:Slider	0.10**	0.03	.001	(.03, .17)	
PTC:Wider	0.23***	0.03	.003	(.16, .29)	
DUT:Slider	-0.09	0.10		(-.28, .10)	
DUT:Wider	-0.20*	0.10		(-.40, -.01)	
Jail:Slider	4.79	6.92		(-5.87, 20.0)	
Jail:Wider	-7.99	7.09	.001	(-25.4, 1.19)	
PTC:DUT:Jail	-0.001	0.00		(-.004, .001)	
PTC:DUT:Slider	0.0001	0.00		(-.003, .003)	
PTC:DUT:Wider	0.002	0.00		(-.001, .004)	
PTC:Jail:Slider	-0.09[m]	.05		(-.19, .001)	
PTC:Jail:Wider	0.15**	0.05	.001	(.05, .24)	
DUT:Jail:Slider	0.04	0.14		(-.22, .31)	
DUT:Jail:Wider	0.79***	0.14	.002	(.52, 1.06)	
PTC:DUT:Jail:Slider	0.002	0.00		(-.001, .006)	
PTC:DUT:Jail:Wider	-0.008***	0.002	.001	(-.01, -.005)	
Gender	4.81*	2.44	.004	(.07, 9.55)	
Blameworthiness	0.09***	0.02	.02	(.05, .14)	
Innocence_Ordin	-0.12**	0.04	.01	(-.21, -.04)	

Note. R^2 marginal is provided for this mixed method multiple regression with semi-partial correlations in the same column for individual parameters when they are greater than or equal to .001.

[m].05 ≤ *p* ≤ .1. *p < .05. **p < .01. ***p < .001.

Figure 10

Original Titration Procedure Example Decision Tree

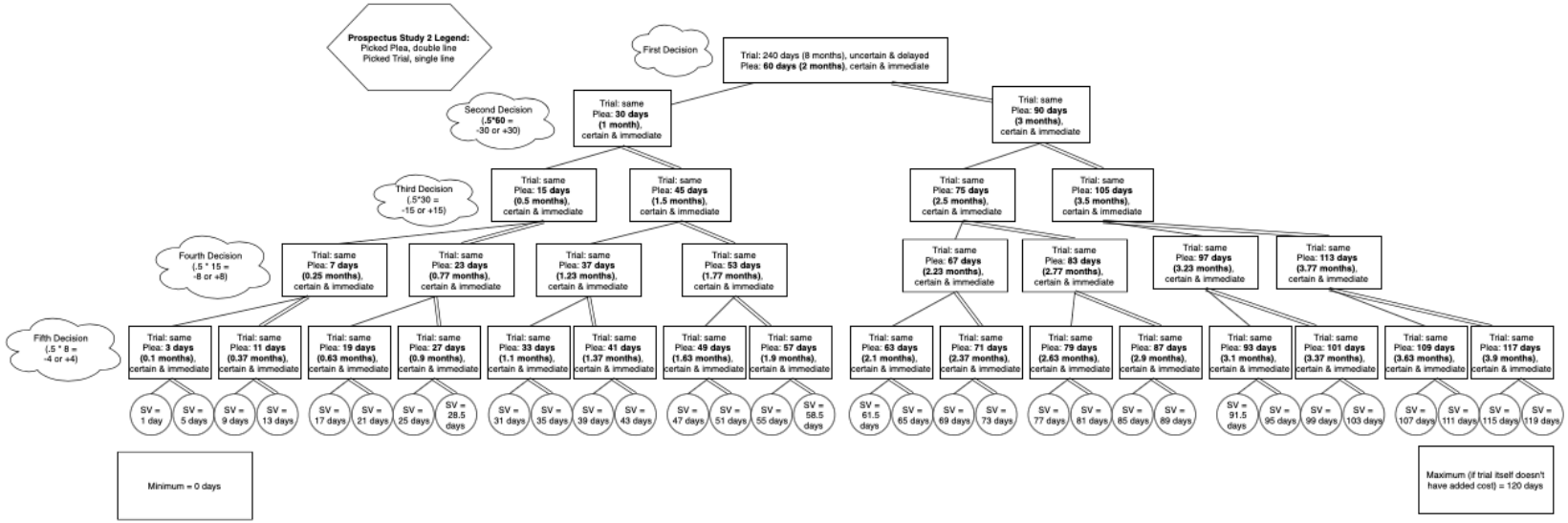


Note. "SV" stands for Subjective Value, or Subjective Trial Aversion. The rectangles represent decisions presented to the participant, but each participant only sees four decisions in this decision tree. Which decisions the participant sees depends on their pattern of responses. Specifically, each participant in the Original Titration condition saw the top decision (with probability and delay specified instead of "uncertain and delayed" in the trial option) and then, based on their response, they saw a second decision. If they selected the plea in the first decision, then they saw the second decision connected by the single line, running down to the left. If they selected trial in the first decision, then they saw the second decision connected by two lines, running down to the right. This continued for four

decisions per probability-delay combination, and then reset for the next probability-delay combination, starting the participant back at the top of the decision tree. In Study 2, participants cycled through this 20 times, once for each probability-delay combination. The range of this measurement method is 32 to 88.

Figure 11

Wider Titration Procedure Example Decision Tree



Note. "SV" stands for Subjective Value, or Subjective Trial Aversion. The rectangles represent decisions presented to the participant, but each participant only sees five decisions in this decision tree. Which decisions the participant sees depends on their pattern of responses. Specifically, each participant in the Wider Titration condition saw the top decision (with probability and delay specified instead of "uncertain and delayed" in the trial option) and then, based on their response, they saw a second decision. If they selected the plea in the first decision, then they saw the second decision connected by the single line, running down to the left. If they selected

trial in the first decision, then they saw the second decision connected by two lines, running down to the right. This continued for five decisions per probability-delay combination, and then reset for the next probability-delay combination, starting the participant back at the top of the decision tree. In Study 2, participants cycled through this 20 times, once for each probability-delay combination. The range of this measurement method is 3 to 237.

Figure 12

Study 2 Distribution of Subjective Trial Aversion by Measurement Method Condition

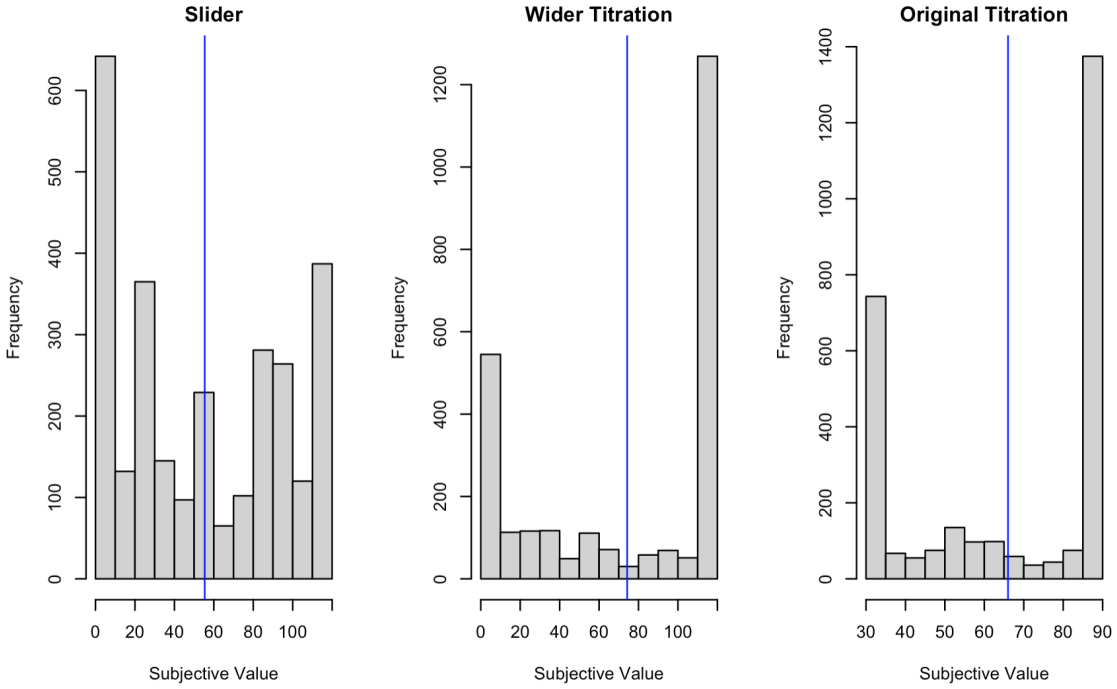


Figure 13

Study 2 Measurement Method x Probability of Trial Conviction Interaction

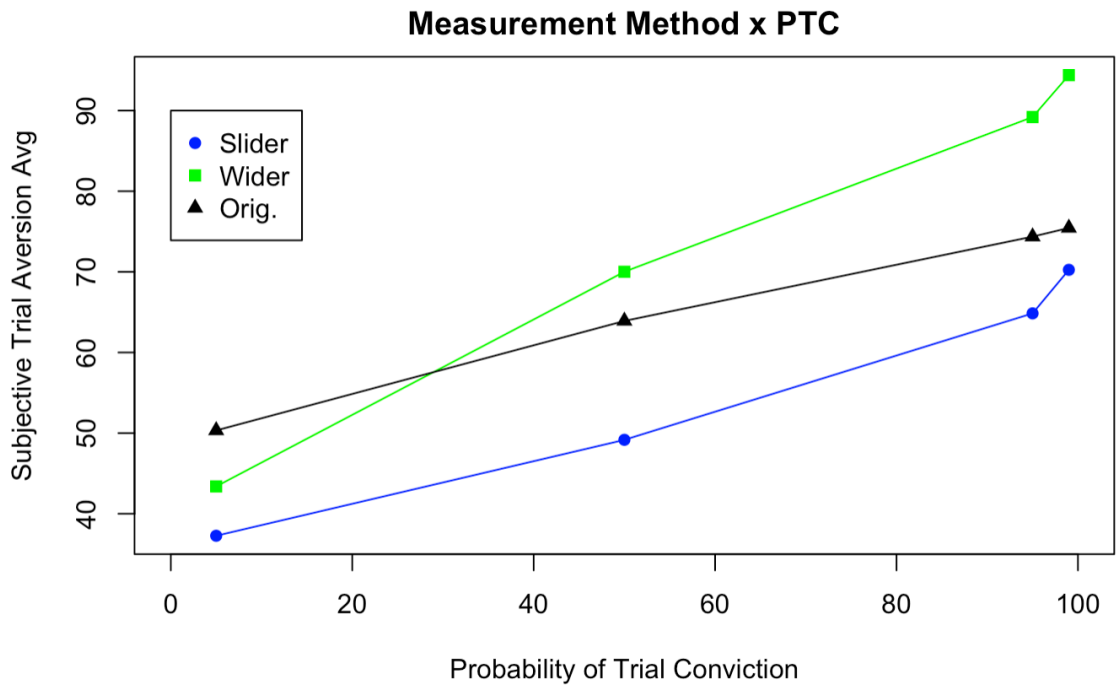


Figure 14

Study 2 Three-way interaction among Probability of Trial Conviction, Delay until Trial, and Measurement Method

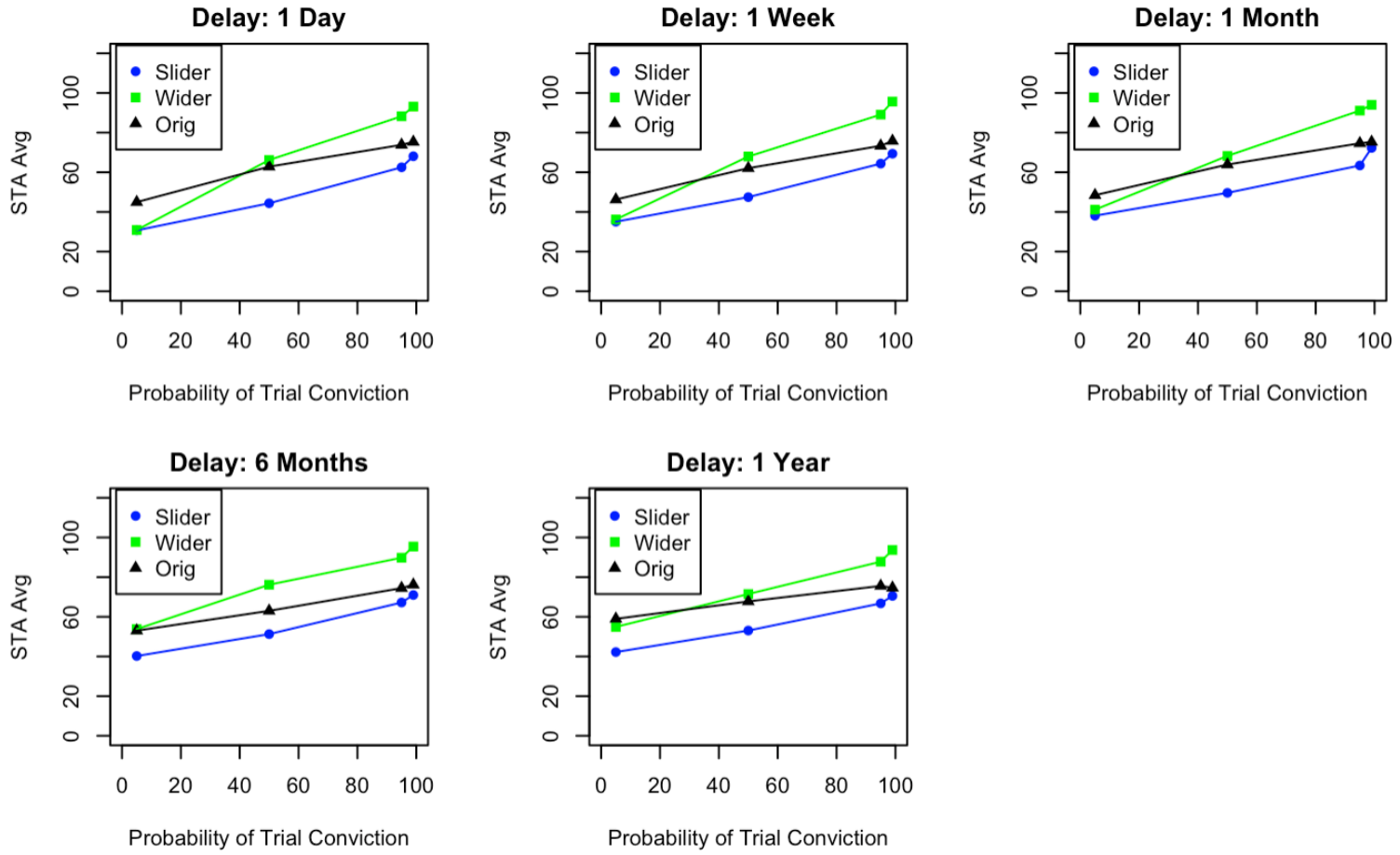
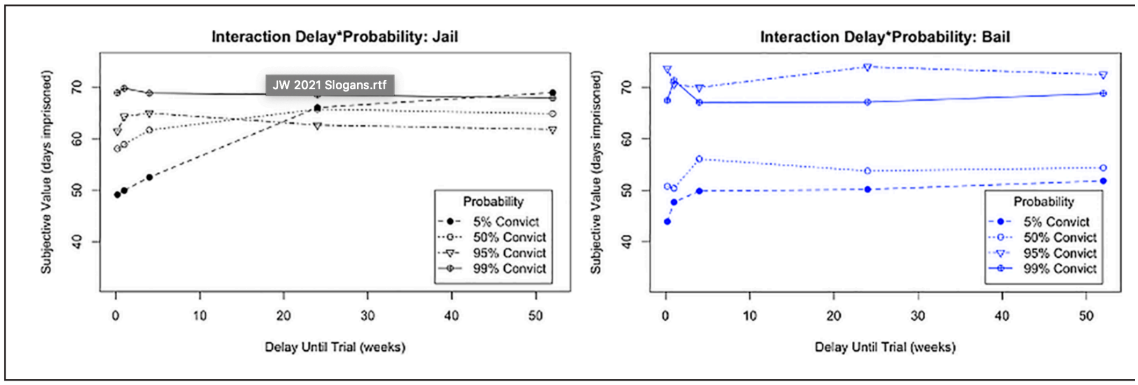


Figure 15

Clatch & Borgida (2021) Study 3 Graphs Compared to Study 2's Three Measurement Method Conditions



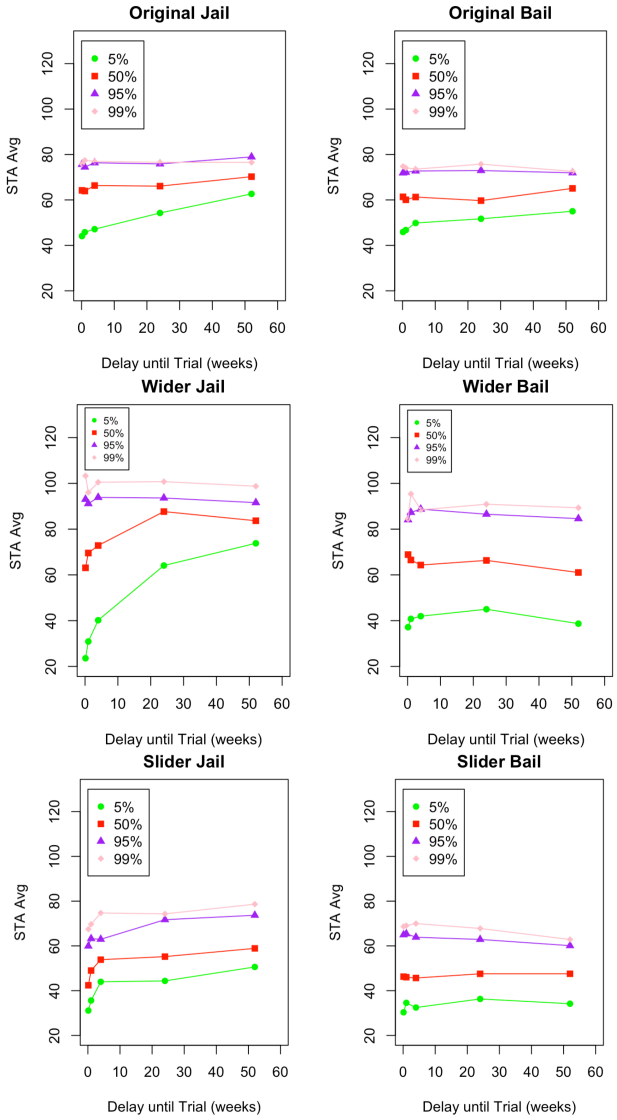


Figure 16

Study 2 Impulsivity*PTC Interaction on Subjective Trial Aversion

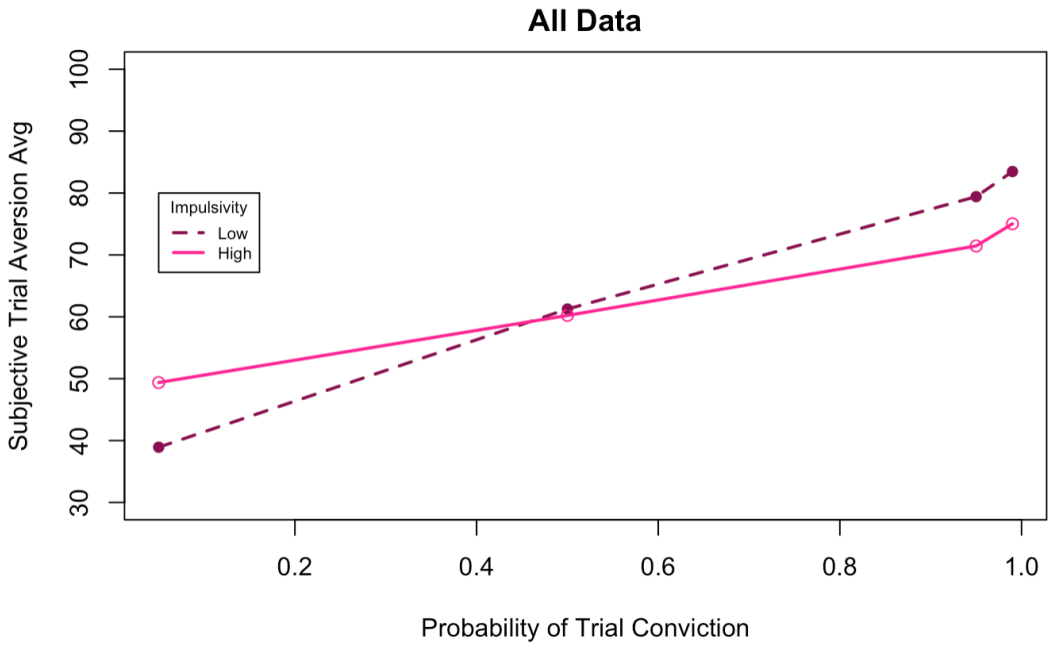


Figure 17

Study 2 Impulsivity*DUT Interaction on Subjective Trial Aversion

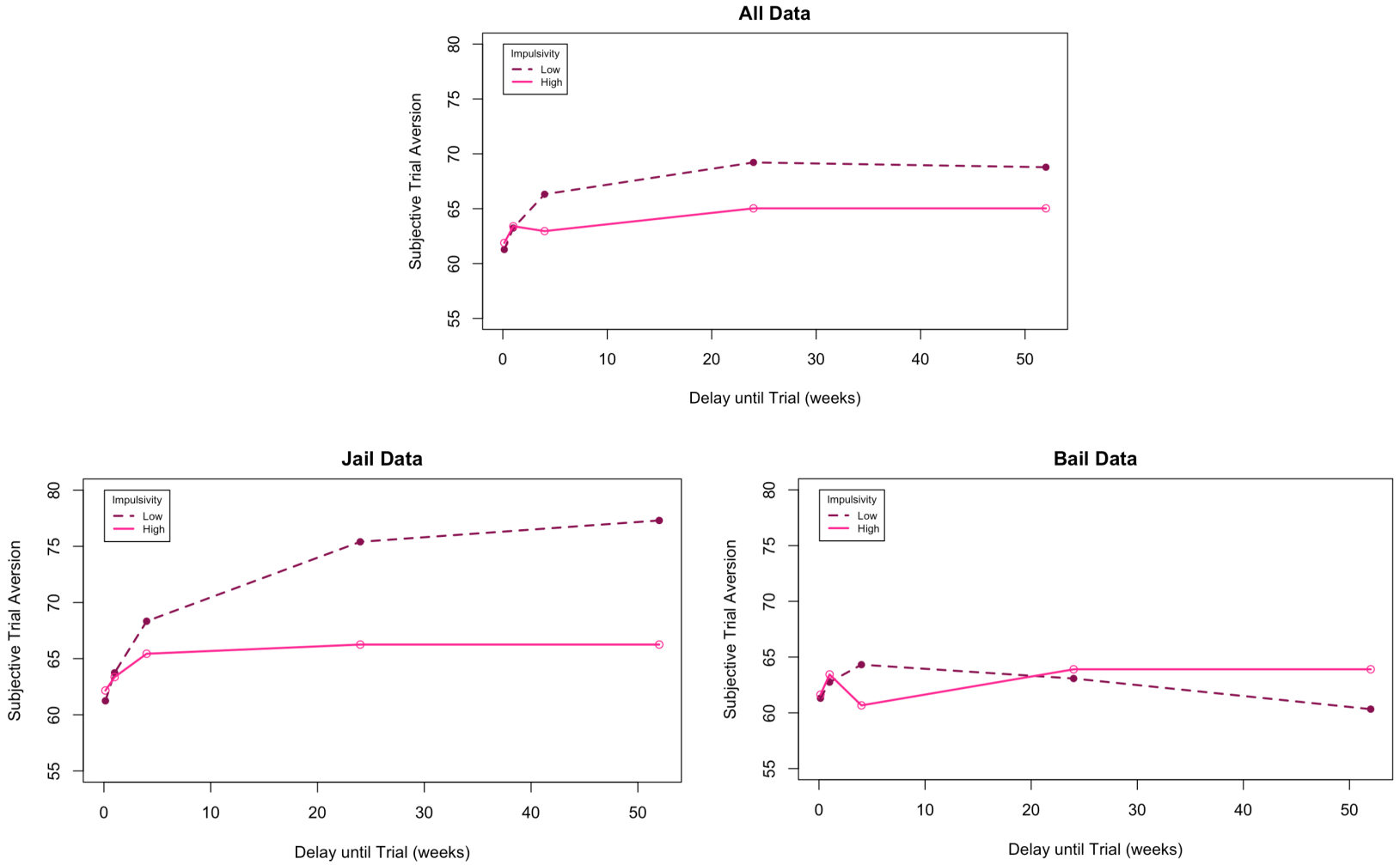


Figure 18

Study 2 Blameworthiness*PTC Interaction on Subjective Trial Aversion

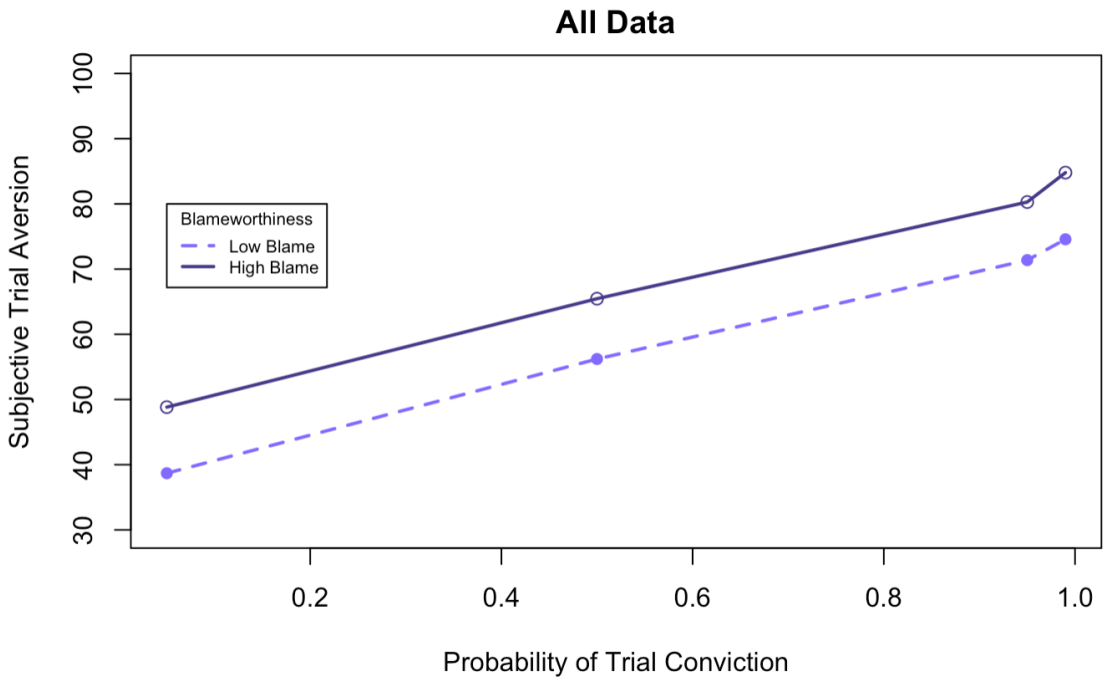


Figure 19

Study 3 Wider Titration Example Decision Tree

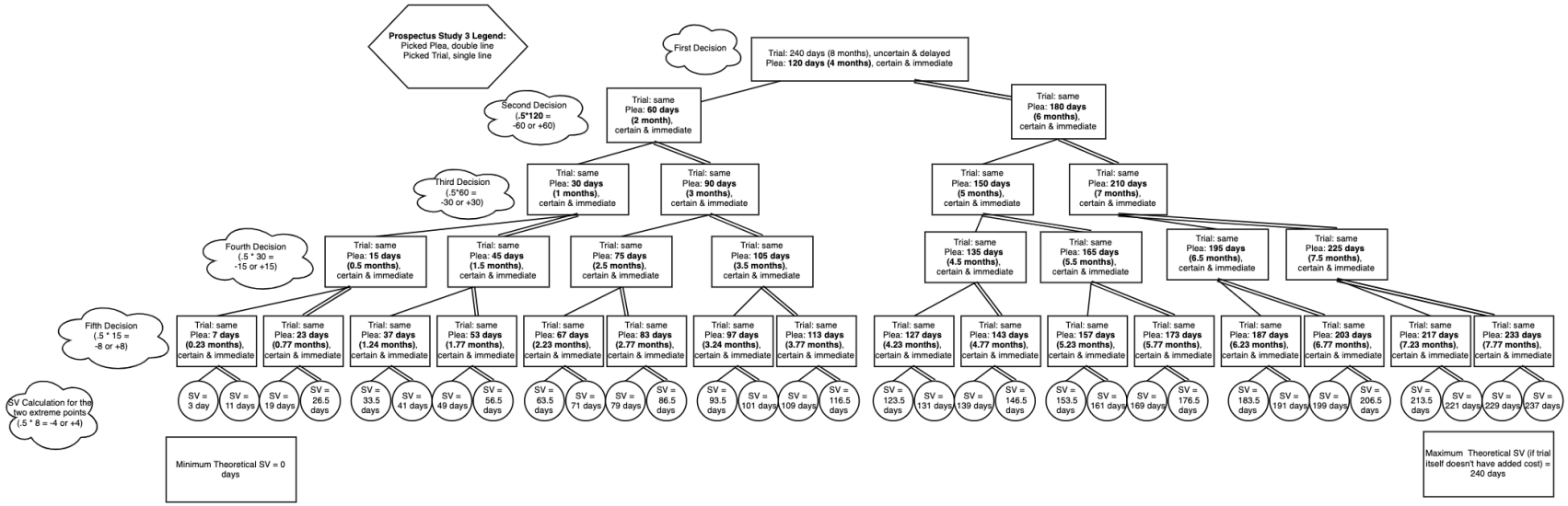
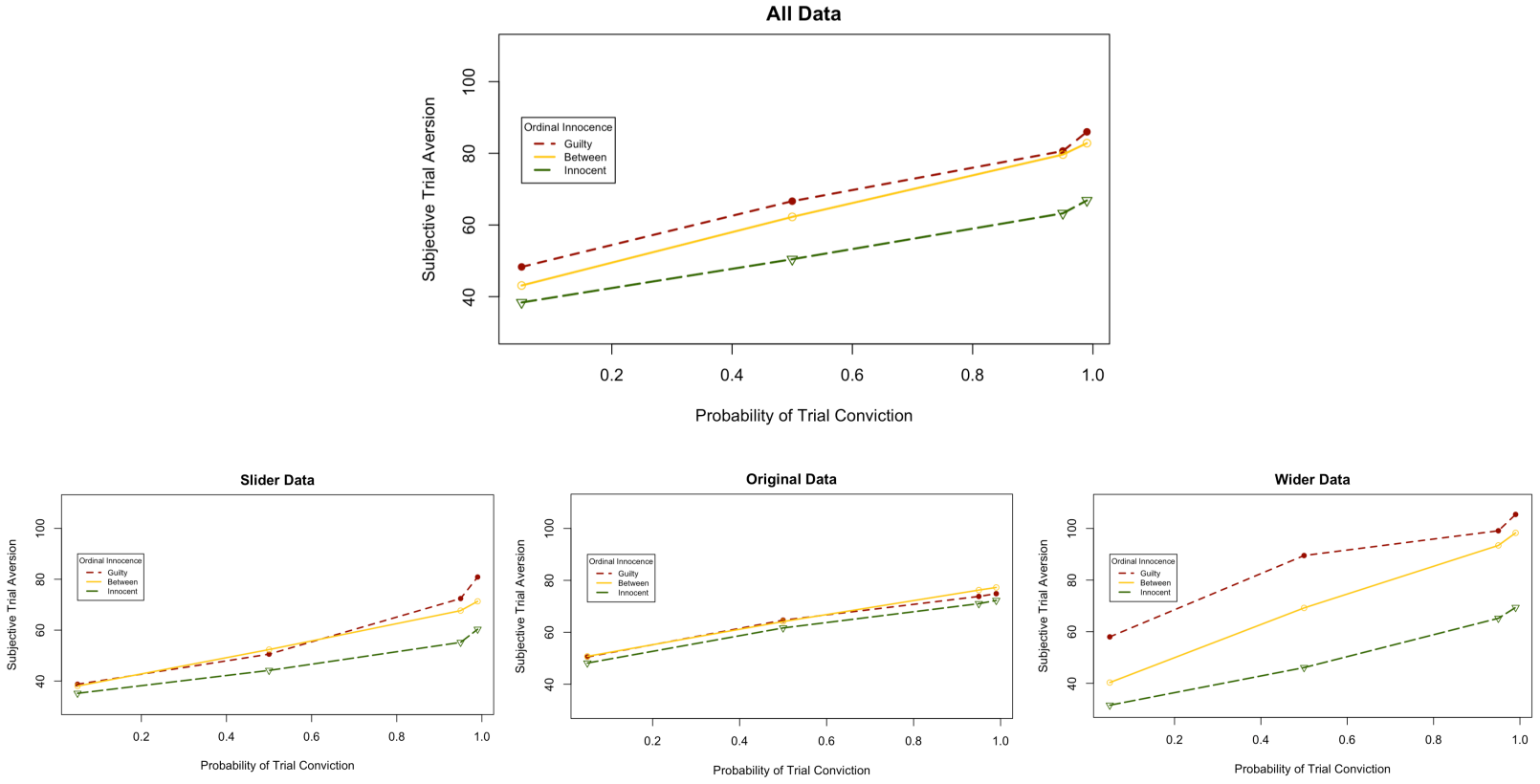


Figure 20

Study 2 Ordinal Innocence * Probability of Trial Conviction by Measurement Method



Chapter 4: Study 3 – To What Extent Does Factual Innocence Change Plea-Bargain Decision-Making Processes?

The purpose of Study 3 is to determine whether another legally, and psychologically, relevant situational cue influences discounting in plea-bargain decisions. Specifically, the decision-maker's factual innocence and guilt will be manipulated. As discussed in Chapter 1, criminal defendant's factual innocence is another situational feature that is inherent to the plea-bargaining context. Manipulating another situational feature of the plea-bargain context enables a deeper query of under what conditions person variables matter for plea-bargain decision-making as well a richer understanding of whether the influence of probability and delay on plea-bargain decisions are conditioned on factual innocence.

Recent work by psychologists has shown that situational factors like innocence/guilt influences plea bargain behavior. For example, Henderson and Levett (2018, p. 434) found that 71% of guilty participants accepted a plea deal, whereas 37% of innocent participants accepted one.[44] The legal literature, however, assumes that *very* infrequently do innocents plead guilty (Scott & Stuntz, 1992, p. 1942; Easterbrook, 2013, p. 554). This study attempts to quantify the "innocence problem" based on the dual discounting approach developed in Studies 1 and 2, and this study differs from past work assessing innocence/guilt in plea-bargain decisions in two ways: (1) by both manipulating innocence/guilt and measuring *perceptions* of innocence and guilt and (2) by manipulating more situational variables than past work (probability, delay, location, and

[44] Other samples' proportions of innocent participants accepting the plea deal include 26% (Edkins & Dervan, 2018, Study 2), and 7% to 50% (Tor et al., 2010) depending on probability of trial conviction. However none of these studies utilized a discounting framework, measuring Delay until Trial and Probability of Trial Conviction.

factual innocence) to determine whether certain situational effects (e.g., probability and delay) are conditioned on other situational features (e.g., innocence).

Studies 1 and 2 provided quantitative evidence that participants' perceptions of innocence (and guilt) influence their plea-bargain decisions in predictable ways: Participants believing strongly in their innocence choose to go to trial despite its uncertainty and delay. Importantly, Studies 1 and 2 presented participants with a hypothetical scenario in which they are factually innocent (i.e., the scenario has them imagine that did not commit the illegal act of typing a text with their hands while driving), and yet, the participants' plea-bargain decisions indicate that the vast majority of these innocent participants accepted a plea bargain. This suggests that the plea bargain's situational features of certainty and immediacy might overpower the most important legal distinction in the criminal justice system—guilt-innocence.

In fact, Tor and colleagues (2010) found that although there is evidence of the "guilt hypothesis" that guilty participants accept more pleas, 20% of innocent participants pled guilty (Study 1). Then, in their Study 2, the researchers manipulated both Innocence/Guilt and Probability of Conviction and found that high levels of Probability of Conviction caused up to 50% of innocent participants to accept a guilty plea, and as a whole, guilty participants were less influenced by Probability of Conviction relative to innocent participants. Accordingly, the following was hypothesized in the present study:

H3a. *Consistent with the "guilt hypothesis," guilty participants will accept significantly more guilty pleas than innocent participants. However, it is predicted that the plea-bargain-decision distributions of the two groups are largely overlapping, suggesting that the phenomena of innocence and guilt are not categorically distinct.*

H3b. *Probability of Trial Conviction and Factual Innocence will interactively predict plea-bargain decisions such that there should be a flattened (potentially non-significant) effect of Probability of Conviction on guilty participants' plea-bargain decisions relative to innocent participants.*

Next, the research testing the guilt hypothesis combined with research by Clatch and Borgida (2021) and Study 2 of this dissertation suggest the possibility of an interaction between Waiting-for-Trial Location and Factual Innocence to predict plea-bargain decisions. In particular, Clatch and Borgida (2021; Study 3, see their Table 4) and Study 2 of this dissertation found that waiting for trial in jail results in participants being more likely to accept plea bargains. Additionally, other researchers including Henderson and Levett (2018) have found that guilty participants were more likely to accept a plea bargain than innocent participants. Last, Edkins and Dervan (2018) found a marginally significant effect between guilt/innocence and pretrial detention on single binary plea decisions, such that pretrial detention induced innocent participants to plead guilty more than it induced guilty participants to do so. Accordingly, the following was hypothesized:

H3c. *Guilty participants waiting in jail will be the most likely to accept pleas relative to the three other groups (Innocent-Jail, Innocent-Bail, and Guilty-Bail).*

H3d. *Additionally, guilty participants, will have a weaker, or null, effect of Waiting-for-Trial Location on their plea decisions relative to the significant effect for innocent participants. If this prediction is true, it could mean that the Guilty-Jail group did not have statistically different plea decisions compared to the Guilty-Bail group but*

did have different plea decisions compared to the two Innocent groups (making one of the three comparisons in Hypothesis 3c null).

Furthermore, to try and replicate the findings from Studies 1 and 2, many of Study 2's hypotheses are adopted in Study 3. The Measurement Method hypothesis (H2b) is moot in the present study because Study 2's Measurement Method findings identified the Wider titration procedure as the best measurement method for the present purposes. Additionally, the Need for Cognitive Closure and Negative Contemplative hypotheses required extensive data manipulations and follow-up analysis and thus were not included in the core set of analyses performed in the present study. In addition to Study 2's hypotheses regarding impulsivity, which involve predicting that, compared to relatively impulsive participants, those who are less impulsive will be more responsive to the situational features of probability and delay relative to high-impulsivity participants, the following was hypothesized because Factual Innocence is yet another situational feature of the plea-bargaining context:

H3e. *Impulsivity and Factual Innocence will interact such that guilty participants who have relatively low impulsivity scores will accept plea bargains more than their low-impulsivity-innocent counterparts, and high-impulsivity participants will follow a similar pattern but with smaller difference between the innocent and guilty sub-groups. This suggests that high-impulsivity people's plea-bargain decisions are less influenced by Factual Innocence than are their low-impulsivity counterparts.*

Last, with the introduction of a factual innocence/guilt manipulation in the present study, participants' perceptions of fairness of their plea-bargain process and decisions are psychologically relevant. For example, it would be important to know whether both

groups of participants (factually innocent and factually guilty) perceive their plea-bargain process and decisions similarly. On the one hand, one could expect that people who are factually innocent to feel that the plea-bargaining system is unfair, considering that in accepting a plea bargain they are falsely admitting guilt. On the other hand, one could expect that once people are criminally charged and forced to confront that reality and make plea-bargain decisions, they justify the system and their arguably rational decisions to accept less jail time to resolve the matter quickly (especially when probability of conviction at trial is high).

Houlden (1980) showed that criminal defendants' preference for participation in the plea-bargaining process is not affected by factual innocence and guilt, but that undergraduates' preference for participation in the plea-bargaining process was only weakened when they were guilty *and* faced strong evidence (i.e., a high likelihood of conviction at trial). Additionally, Casper et al. (1988) found that criminal defendants' criminal sentences (either through plea agreements or post-trial) influenced their perceptions of procedural justice. However, no research to date has assessed whether plea-bargain behavior influences perceptions of procedural justice. Thus, although procedural justice is a psychologically relevant construct for the present study, no directional hypotheses are made.

Method

Participants

Participants were recruited on Prolific and received $4.90 for their participation. Prolific is a source of online convenience samples and is an increasingly-used alternative to Amazon Mechanical Turk. The final sample ($N = 334$) was nationally representative

based on gender, race and age,[45] except that Black Americans were oversampled to allow for better race sub-group comparisons. Roberts and colleagues (2020) have empirically demonstrated systemic inequality in psychological research in the last five decades. Specifically, despite the fact that race plays an important role in how people think, develop, and behave (e.g., Roberts & Rizzo, 2021), race is rarely highlighted in psychological publications, and even more rarely are non-White participants substantially represented in samples (Roberts et al., 2020). Roberts and colleagues recommend justifying racial demographics of study samples. Thus, this study strove to balance generalizability to the population of the United States (on the basis of gender and age) with collecting a large enough sample of Black Americans to make cross-race comparisons of plea-bargain decision-making. This latter purpose derives from a motivation to recognize that people of color, especially black men, have long been overrepresented in the U.S. criminal justice system (Spohn, 2011).

The final sample consisted of 50.60 % (n = 169) women and 46.71 % (n = 156) men and had a mean age of 43.92 (SD = 14.61). The dataset consists of 62.78% self-identifying White participants (n = 208), 23.35% (n = 78) Black participants, 5.39% (n = 18) Asian participants, .6% (n = 2) Native Hawaiian or Pacific Islander participants, 0.9% (n = 3) Native American, and 6.9% (n = 23) multi-racial or other racial identity. Twenty-

[45] Using the same percentages as Study 2, which utilized the United States Census Bureau's estimates for age, gender, race, and ethnicity categories of the United States population up to the year 2019. Using those estimates the following quotas were entered into Qualtrics: 18-24 aged people (13%), 25-34 aged people (18%), 35-44 aged people (18%), 45-54 aged people (19%), 55-64 aged people (16%), over-65 aged people (17%); men (49%), women (51%); White-only (72%), Black/African American only (13%), Asian only (5%), Native American (1%), Other, including Native Hawaiian and people self-identifying with more than one race category (9%); and Hispanic (18%), Non-Hispanic (82%).

three (6.89%) participants self-identified as Hispanic, with 309 (92.51%) identifying as Non-Hispanic.

One participant completed only Middle school, 39 (11.68%) participants completed only High school, 77 (23.05%) completed only Part of college, 132 (39.52%) completed only a College degree, and 83 (24.85%) completed a Graduate degree.

Design

This study employed a 2 (Factual Innocence) x 2 (Waiting-for-Trial Location) x 4 (Probability of Trial Conviction) x 5 (Delay until Trial) mixed-factor design with 2 between-participants variables: Factual Innocence with two levels (Innocent vs. Guilty, see SM 35 for the exact wording of the manipulation) and Waiting-for-Trial Location with two levels (Jail, Bail). As in Studies 1 and 2, the Jail and Bail conditions contained language in the vignette describing where participants were physically located (see SM 3 for the exact wording of the manipulation). The two within-participants variables are Probability of Trial Conviction with four levels (5%, 50%, 95%, 99%) and Delay until Trial with five levels (1 day, 1 week, 1 month, 6 months, 1 year).

Factual Innocence and Waiting-for-Trial Location were fully crossed, and participants were randomly assigned to one of the four conditions. Each participant received all five levels of Delay until Trial presented in random order to reduce the chance of order effects. Within each Delay, each participant received all four levels of Probability of Trial Conviction, and the blocks were shown in ascending order. The key outcome variable, as in Studies 1–2, was *Subjective Trial Aversion*.[46] Like Study 2's Wider Titration procedure, the procedure used in the present study involved five

[46] Chapter 3's Figure 19 shows the Subjective Trial Aversion scores at each tipping point.

decisions per decision tree, but rather than having a range of 1 to 119 days, this study's Subjective Trial Aversion ranged from 3 to 237 days (see Figure 19 in Chapter 3 for the full example decision tree).

The second outcome variable in this study is *Procedural Justice*, and this new variable will be discussed in more detail in the Materials and Measures section.

There is currently no feasible way to calculate standard effect sizes for individual model terms such as main effects and interactions in mixed effects models because of the way variance is partitioned in mixed models (Rights & Sterba, 2019). As a best approximation, G*Power was used based on a repeated measures ANOVA with 1 between-participants variable and 1 within-participants variable interacted. Given an effect size *f* of .1 (taken from Clatch & Borgida, Study 3, 2021, highest order interaction model term, i.e., Delay*Probability*Waiting-for-Trial Location), an alpha of .05, power of .8, number of between-participants conditions equal to 4, number of within-participants measurements equal to 5 (i.e., Delay with largest number of levels of the two within-participants variables), a correlation among the repeated measures of .03 (calculated based on Clatch & Borgida, Study 3, 2021, correlation of Subjective Trial Aversion scores based on Delay's level), and nonsphericity correction equal to 1, the total sample size required is 340 (see SM 37 for G*Power screenshot). In order to allow for a degree of missing data, 350 participants' data were collected.[47]

Materials, Measures and Procedure

[47] To this point I had never used Prolific to collect data, but various other colleagues informed me that they had less than 1% missingness using Prolific. In case my experience with Prolific produced slightly more missingness than my colleagues I allowed for 2-3% missingness, rounding from 340 to 350.

The study materials consisted of an online survey very similar to Study 2's survey. As in Study 2, this survey contained the same attention and data quality checks (see SM 2), a vignette/scenario (SM 3), legal decision-making questions (SM 5), individual difference measures (e.g., Impulsivity, but adapted System Justification was not measured), and demographic and experience questions. The Study 2 vignette/scenario was altered consistent with the creation of the Factual Innocence manipulation as described in this study's Design section. In addition, the legal-decision-making instructions and question set-up was edited to increase the salience of Waiting-for-Trial Location and to generally make the instructions simpler and clearer (see SM 38 for the exact wording). In addition to the Study 2 measures, the following measures were added to the survey: Legal Experience (SM 39) and Procedural Justice (SM 36).

The Blameworthiness, Perceptions of Innocence (categorical innocence followed by continuous measurement of innocence), Negative Contemplative Emotions, and Procedural Justice questions were presented in random order after the series of binary, forced-choice plea-bargain questions. Then, the measures of Need for Cognitive Closure, Impulsivity, and Personal Involvement were presented in random order before the driving and accident, criminal experience, legal experience, and demographic questions.

The new Factual Innocence manipulation was pilot tested. Using 61 Lucid Theorem participants, the Innocence manipulation was tested and validated. Innocent participants perceived themselves to be more innocent ($M = 45$, $SD = 34.75$) and less guilty ($M = 54.09$, $SD = 34.07$) than did Guilty participants (innocence ratings $t(57) = -2.55$, $p < .05$; $M = 23$, $SD = 32.46$); guilt ratings $t(58) = 3.49$, $p < .001$; $M = 82.74$, $SD = 64.91$). Additionally, a manipulation check of the present study's data revealed that

participants in the Innocent condition perceived themselves to be significantly more innocent (M = 62.86, SD = 32.66) than did participants in the Guilty condition ($t(324)$ = 10.95, $p < .001$; M = 24.61, SD = 30.67), and participants in the Guilty condition perceived themselves to be significantly more guilty (M = 75.93, SD = 31.51) than did participants in the Innocent condition ($t(325)$ = -10.92, $p < .001$; M = 37.01, SD = 33.13).

Procedural Justice

Lind and Tyler (1988) outline various ways in which procedural justice has been measured by researchers, including a single-item measure asking how fair a particular procedure is that the participant experienced or a collection of questions asking closely related questions like how satisfied the participant is with the procedure. SM 36 shows the Procedural Justice (PJ) measure used in Study 3, which included five items that asked about the fairness of the plea-bargaining process and outcomes, as well as how much control the participant felt over their decisions and if they would trust the plea-bargaining system in the future. The five-item measure had a reliability of $\alpha = .87$.

Legal Experience

The additional questions were both broader and more specific than Study 1 and Study 2's Criminal Justice System Experience measures. Specifically, participants were asked whether they had had any legal system experience, including either civil and/or criminal. Then, based on their answer, they were asked to explain their role in the legal system (e.g., party in a case or a juror). They were also asked to what extent they trusted the judge and attorney involved in the case. Additionally, if participants responded to the questions asked in Study 2 (Specific Criminal Experience questions) by saying that they had been a criminal defendant and chose to go to trial (rather than accept a plea bargain)

then they were asked how much they trusted the judge and jury in their case as well as their attorney. They were also asked whether they chose to testify at trial and where they were while waiting for trial (jail vs. bail). Last, all participants who had responded that they personally had criminal justice system experience or someone they are close with had criminal justice system experience were asked whether and to what extent their experiences affected their thoughts or feelings about the criminal justice system.

Decision-Making Reasons

In order to capture potential group differences in reasons for their plea-bargain decisions, a variety of questions were asked. Participants were asked to rate the importance (1 = *least important*, 7 = *most important*) of the following factors to the plea-trial decisions they made previously in the survey: my innocence/guilt, my probability of losing at trial, the delay until trial, the length of my criminal sentence (i.e., days in jail), and where I awaited trial (e.g., in jail or out on bail).

Hypotheses

As mentioned in Study 3's introduction, because no research has assessed whether plea-bargain *behavior* influences perceptions of procedural justice no formal hypotheses were specified for Procedural Justice (PJ) or Legal Experiences. However, the relations between PJ and Subjective Trial Aversion, PJ and Legal Experiences, and PJ and Factual Innocence were examined. Additionally, the relation between participant Race and their Legal Experiences was examined.

Situation Predictors

Factual Innocence. The new situational manipulation of factual innocence involved the following four predictions.

Hypothesis 3a. *Consistent with the "guilt hypothesis," guilty participants will have significantly higher Subjective Trial Aversion scores than will innocent participants. However, it is predicted that the two groups' Subjective Trial Aversion scores distributions will be largely overlapping, suggesting that the phenomenology of innocence/guilt are not categorically distinct.*

Hypothesis 3b. *Probability of Trial Conviction and Factual Innocence will interactively predict Subjective Trial Aversion scores such that there should be a flattened (potentially non-significant) effect of Probability of Conviction on guilty participants' Subjective Trial Aversion scores relative to innocent participants.*

Hypothesis 3c. *Guilty participants waiting in jail will have the highest Subjective Trial Aversion scores relative to the three other groups (Innocent-Jail, Innocent-Bail, and Guilty-Bail).*

Hypothesis 3d. *Additionally, guilty participants, will have a weaker, or null, effect of Waiting-for-Trial Location on Subjective Trial Aversion scores relative to the significant effect for innocent participants. If this prediction is true, it could mean that the Guilty-Jail group did not have statistically different plea decisions compared to the Guilty-Bail group but did have different plea decisions compared to the two Innocent groups (making one of the three comparisons in Hypothesis 3c null).*

Hypothesis 3e. *Impulsivity and Factual Innocence will interact such that guilty participants with relatively low impulsivity scores will have higher Subjective Trial Aversion scores than will their low-impulsivity-innocent counterparts, and high-impulsivity participants will follow a similar pattern but with smaller difference between the innocent and guilty sub-groups. This suggests that high-impulsivity people's*

Subjective Trial Aversion scores is less influenced by Factual Innocence compared to their low-impulsivity counterparts.

Other Experimental Effects. The previously-manipulated situational features of Delay, Probability, and Waiting-for-Trial Location produced the following three-way interaction prediction:

Hypothesis 3f. A significant interaction between Probability of Trial Conviction and Delay until Trial should only appear in the Jail condition (i.e., not the Bail condition), and the direction of probability and delay effects should be consistent with those found by Clatch and Borgida (2021) and Study 2 findings reported in Chapter 3.

Trait-Level Predictors

Impulsivity.

Hypothesis 3g. *Highly impulsive participants will prefer the uncertain/risky option, trial, evincing lower Subject Trial Aversion scores, relative to less impulsive participants.*

Hypothesis 3h. *Participants' impulsivity will interact with Probability of Trial Conviction, such that relatively less impulsive participants will be more sensitive than more impulsive participants to probability information, evincing a stronger positive relation between Probability of Trial Conviction and Subjective Trial Aversion scores.*

Hypothesis 3i. *Participants' impulsivity will interact with Delay until Trial, such that low-impulsivity participants will be especially sensitive to the trial's delay, evincing a stronger positive relation between Delay until Trial and Subjective Trial Aversion scores than more impulsive participants, who will be less sensitive to the delay until trial.*

Situated-Person Predictors

Blameworthiness and Innocence.

Hypothesis 3j. *Participants experiencing more self-blame for the accident and child's injury will have higher Subjective Trial Aversion scores than will participants experiencing less self-blame.*

Hypothesis 3k. *Participants who perceive themselves as less innocent of the crime charged will have higher Subjective Trial Aversion scores than will participants who perceive themselves to be more innocent.*

Hypothesis 3l and 3m. *Neither participants' self-blame nor their perceptions of Innocence will interact with Probability of Trial Conviction to influence Subjective Trial Aversion scores.* That is, blameworthiness and innocence are more accurately described as individual perceptions and beliefs developed while reading the scenario rather than being influenced solely by the situational cue of probability of losing at trial, which is embedded in the plea-bargain decisions.

Results

Preliminary Analyses

SM 40 is a comprehensive resource that shows the exploratory relations between demographic and trait-level predictors, which are provided for background. The accident analyses presented in Studies 1 and 2 will be omitted from the present study because they produced only peripheral findings that did not contribute to core findings in the cross-construct modeling.

Subjective Trial Aversion

In the present study, Subjective Trial Aversion scores ranged between 3 and 237 days in jail, and the upper limit of 237 days was just 3 days short of the trial sentence of 240 days (8 months).[48]

Demographic Analyses

Table 18 shows the simple linear regressions of gender, race, age, and education predicting Subjective Trial Aversion scores. Non-binary-gender-identifying individuals had significantly higher Subjective Trial Aversion scores than did men ($B = 42.19$, $SE = 20.47$, $p < .05$), but that group only contained seven participants. SM 41 shows the boxplot of the gender categories' distributions of Subjective Trial Aversion scores, and the Other category's distribution is skewed to the top of the variables range. Men and women's Subjective Trial Aversion scores had very similar distributions. Also, people in the Other race category had significantly higher Subjective Trial Aversion scores than did Blacks ($B = 25.18$, $SE = 9.81$, $p < .05$), and Whites had marginally higher Subjective Trial Aversion scores than did Blacks ($B = 11.88$, $SE = 7.01$, $p = .09$). Figure 21 shows the boxplot of the race categories' distributions of Subjective Trial Aversion scores, and the mean differences are visibly apparent. Age and Education did not predict Subjective Trial Aversion scores.

Procedural Justice

[48] This change in the measurement of Subjective Trial Aversion relative to Study 2 did not result in a differently shaped distribution. SM 34's top-right graph shows that the distribution of Subjective Trial Aversion scores is still bi-modal despite increasing the plea-bargain sentence to just three days less than the trial sentence. SM 34's top-left graph displays Study 2's Wider Titration data for comparison. SM 34's bottom-right graph shows that participants' average Subjective Trial Aversion scores across the twelve decision trees they each went through. SM 34's bottom-left graph displays Study 2's Wider Titration data for comparison.

Table 19 shows the series of regressions run using Procedural Justice as an outcome measure. None of the demographic variables predicted Procedural Justice, and the one-item legal experience and one-item criminal experience questions did not predict Procedural Justice. However, participants who had legal experience and trusted the judge to whom they were previously exposed also perceived more procedural justice in their plea-bargaining process ($B = .01$, $SE = .003$, $p < .01$). Additionally, participants who had legal experience and rated that experience as more positive also perceived more procedural justice in their plea-bargaining process ($B = .01$, $SE = .003$, $p < .01$).

Table 19 also shows that participants' perceptions of guilt were related to their perceptions of procedural justice in their plea-bargaining process: As participants' perceptions of innocence increased, their perceptions of procedural justice in their plea-bargaining process decreased ($B = -.0005$, $SE = .0006$, $p < .001$). Moreover, the manipulated factors of Factual Innocence and Waiting-for-Trial Location influenced participants' perceptions of procedural justice. More specifically, factually innocent participants had significantly lower perceptions of procedural justice in their plea-bargaining process ($M = 2.50$ $SD = .88$) than did factually guilty participants ($M = 3.01$ $SD = .90$; $B = -.50$, $SE = .10$, $p < .001$). Second, participants who had to wait in jail for trial had significantly lower perceptions of procedural justice in their plea-bargaining process ($M = 2.63$ $SD = .89$) than did participants who awaited trial out on bail ($M = 2.90$ $SD = .94$; $B = -.27$, $SE = .10$, $p < .01$).

Last, because participants completed the plea-bargaining questions before they responded to the Procedural Justice measure, average Subjective Trial Aversion was used as the predictor variable in a simple linear regression, and Subjective Trial Aversion

scores predicted Procedural Justice.[49] As participants' Subjective Trial Aversion scores increased, they perceived more Procedural Justice about the process (B = .003, SE = .0009, p < .01).[50]

Race-Based Differences: Legal Experiences, Reported Decision-Making Reasons, and Experimental Factors

Because Study 3's Demographic Analyses section indicated that there were race differences in participants' patterns of plea-bargain decision-making, follow-up analyses were conducted to explain why this might be. First, a series of analyses was conducted to determine whether the racial groups differed in their legal experiences (valence of open-ended responses, overall legal system evaluation, trust in lawyers, or trust in judges), which would suggest that differences in real-world criminal justice system experience was a lens through which participants may have viewed the hypothetical plea-bargaining situation. Second, a series of analyses was conducted to determine whether the racial groups differed in their reported Decision-Making Reasons. Third, because the racial groups did differ in their reported Decision-Making Reasons, the interactions between Race and key experimental factors were conducted to determine the direction of Race's influence.

First, Table 20 shows that Race did not predict Legal Experience, their trust of the judge, or their trust of the lawyer(s) (ps > .1). Participants' open-ended responses to whether their experiences affected their thoughts or feelings about the criminal justice

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[49] And keeping Subjective Trial Aversion as the outcome variable still revealed a significant relation: as Procedural Justice increased, Subjective Trial Aversion increased (B = 8.81, SE = 3.14, p < .01).

[50] Figure 22 presents the scatterplot of the two variables with a blue regression line that has a visibly positive slope.

system were coded by a single research assistant for general positivity, general negativity, or neutral/evenly-mixed responses, but participant Race did not predict their valence-coded responses ($\chi^2(4, 123) = 1.98$, $p > .1$).

Second, the comparison between Whites and Blacks was focused on regarding their Decision-Making Reasons to simplify analyses and for two other reasons: (1) Blacks are disproportionately represented in the criminal justice system and thus might view the criminal justice system differently than the historically advantaged group (i.e., Whites) and (2) the Other-race group, containing 46 participants, had a plurality of Asian participants, who are not an overrepresented group of color in the criminal justice system.

SM 42 shows the Decision-Making Reasons' correlations with each other, and the reliability of four factors' importance ratings (probability, delay, criminal charge and sentence, and waiting-for-trial location) was $\alpha = .71$.[51] Whites rated this constellation of situational features (probability, delay, criminal charge and sentence, and waiting-for-trial location) as significantly less important to their plea-bargain decisions than did Blacks ($B = -3.12$, $SE = 1.45$, $p < .05$). Additionally, Whites rated their factual innocence as significantly less important to their plea-bargain decisions than did Blacks ($B = -.55$, $SE = .28$, $p < .05$).

Because of these race-based differences, a series of multiple regressions was performed to determine whether the experimental factors did in fact influence plea-bargain decisions differentially for Blacks and Whites. Two-way interactions between Race and the experimental variables of Probability of Trial Conviction, Delay until Trial,

[51] But when the Innocence factor was added, reliability dropped to $\alpha = .51$, so it was left out of this variable consolidation.

Waiting-for-Trial Location, and Factual Innocence were performed. Whites' plea-bargain decisions were more influenced by Probability of Trial Conviction relative to Blacks' (B = .25, SE = .05, $p < .001$), and no other experimental variable interacted with Race alone (see Table 21 for other interactions' null effects). Figure 23 shows a steeper gray line for White than the black line for Blacks.

Next, a series of three-way interactions among Race and the experimental variables were conducted. Whites' plea-bargain decisions were more influenced by the multiplicative combination of Probability of Trial Conviction and Waiting-for-Trial Location than were Blacks' plea-bargain decisions (B = .29, SE = .09, $p < .01$; see Table 21). Figure 24's top panel shows that White and Black participants responded similarly when they were out on Bail (overlapping dashed lines), but when they were waiting in Jail, Black participants became less responsive to Probability relative to White participants and relative to their Black counterparts in the Bail condition.[52] Additionally, Whites' plea-bargain decisions were more influenced by the multiplicative combination of Probability of Trial Conviction and Factual Innocence than were Blacks' plea-bargain decisions (B = .61, SE = .09, $p < .001$; see Table 21). Figure 24's bottom panel shows a number of differences in how Black and White participants responded to Factual Innocence and Probability. First, overall, across conditions, White participants were more influenced by the manipulations because their Subjective Trial Aversion averages ranged from 41 to 203 whereas Black participants' Subjective Trial Aversion averages range from 63 to 190. Second, the groups responded to Factual Innocence/Guilt very

[52] A four-way interaction was run, but the interaction term that was on interest was nonsignificant (see SM 43).

differently. White participants in the Innocent condition, with the steepest of the four lines, were most responsive to Probability, whereas Black participants in the Innocent condition, with the flattest of the four lines, were the least responsive to Probability.

Hypothesis Testing

Situation Predictors

Factual Innocence. This new experimental manipulation involved four predictions (H3a-H3d). Consistent with H3a, Factually Guilty participants had significantly higher Subjective Trial Aversion scores than did Factually Innocent participants(B = -19.05, SE = 5.75, $p < .01$). It may be seen in Figure 25, however, that as predicted, the distributions were substantially overlapping.

Additionally, consistent with H3b, Probability of Trial Conviction and Factual Innocence interacted to predict Subjective Trial Aversion scores (B = .24, SE = .04, $p <$ .001). Figure 26 shows that the red Guilty line is shallower than the green Innocent line, consistent with the descriptive expectation that for guilty participants the probability effect on Subjective Trial Aversion scores should be weaker than that for innocent participants.

Three t-tests were conducted to test H3c's prediction that Guilty-Jail participants would have the highest Subjective Trial Aversion scores. Figure 27 shows the distributions of the four groups' Subjective Trial Aversion scores. As expected, the Guilty participants in Jail had significantly higher Subjective Trial Aversion scores (M = 165.08 SD = 48.27) than Guilty participants out on Bail (M = 144.60 SD = 57.36; $t(169) = 2.54$, $p < .05$), Innocent participants in Jail (M = 149.48 SD = 42.58; $t(156) = 2.21$, $p <$

.05), and Innocent participants out on Bail (M = 116.29 SD = 53.64; $t(139) = 5.81$, $p <$ .001).

Because prediction ***H3d*** makes predictions about the differential influence of Waiting-for-Trial location on Subjective Trial Aversion scores in Innocent and Guilty groups, the interaction of the two variables was tested and found to be nonsignificant (B = 12.72, SE = 11.21, $p > .1$).[53] Last, counter to H3e, Impulsivity and Factual Innocence did not interact (B = .57, SE = 1.61, $p > .1$).

Other Experimental Factors. As may be seen in Table 22, the anticipated three-way interaction among Probability of Trial Conviction, Delay until Trial, and Waiting-until-Trial Location was found (B = -.17, SE = .02, $p < .001$). Figure 28 shows this three-way interaction: the lack of Delay effect in the Bail condition, evinced by the flat lines in the right graph combined with the interactive Probability-by-Delay effect in the Jail condition, evinced by the left graph's upward sloping lines that decrease in their steepness as Probability of Trial Conviction increases.

Trait-Level Predictor: Impulsivity

A simple linear mixed-effects regression was run to test ***H3g***, but Impulsivity's parameter estimate was nonsignificant (see Table 22). A mixed-effects multiple regression was run to test the interaction between Probability of Trial Conviction and Impulsivity (H3h), and, as expected, participants with higher impulsivity showed less of a probability effect (B = -.03, SE = .02, $p < .001$; see Table 22). Figure 29 shows a steeper

[53] In order to understand this null effect, it was graphed. Figure 27 shows this null interaction: the increase from Guilty-Bail's median Subjective Trial Aversion Value (represented by the thick black line in the middle of the bar) to Guilty-Jail's median is relatively parallel to the increase from Innocent-Bail's median to Innocent-Jail's median.

purple probability regression line for low-impulsivity participants relative to the pink high-impulsivity regression line suggesting that low-impulsivity participants were more sensitive to probability in their plea decisions. A mixed-effects multiple regression was run to test the interaction between Delay until Trial and Impulsivity (***H3i***), and the interaction term was nonsignificant (B = -.004, SE = .01, p > .1; see Table 22).

Situated-Person Predictors: Blameworthiness and Innocence

Consistent with ***H3j***, participants experiencing more self-blame for the accident and child's injury had higher Subjective Trial Aversion scores than did participants experiencing less self-blame (B = .26, SE = .04, p < .001). Consistent with ***H2k***, participants who perceived themselves be less innocent of the crime charge had higher Subjective Trial Aversion scores compared to participants who perceived themselves to be more innocent (B = -.51, SE = .07, p < .001).[54]

Counter to ***H3l***, Blameworthiness interacted with Probability of Trial Conviction to predict Subjective Trial Aversion scores (B = -.001, SE = .0002, p < .001). Figure 30 shows nearly parallel lines with a subtle conversion of the two groups' regression lines at 95% and 99% probabilities. But consistent with ***H3m***, Perceptions of Innocence did not interact with Probability of Trial Conviction to predict Subjective Trial Aversion scores (B = .0008, SE = .0005, p > .1). However, using the Perceptions of Guilt or the composite score produced significant interaction terms (see Table 22). Figure 31 used the composite

[54] Participants who perceived themselves be more guilty of the crime charge had higher Subjective Trial Aversion scores than did participants who perceived themselves to be less guilty (B = .47, SE = .07, p < .001). Additionally, because the continuous measurements of Perceptions of Innocence and Perceptions of Guilt were correlated at -.88, a composite score was created by subtracting the guilt score from the innocence score.

Perceptions of Innocent values to create an interaction plot analogous to those seen in Studies 1 and 2 using those studies' ordinal innocence measures, and it may be seen that participants who believed themselves to be innocent were more sensitive to Probability once it was more likely than not (i.e., greater than 50%) that they would be convicted at trial than their guilty and in-between counterparts.

Cross-Construct Modeling

As performed by Clatch and Borgida (2021) and in the two previous chapters of this dissertation, multiple regressions with experimental and non-experimental Person (and Situated Person) variables were conducted to test whether the effects of Person variables account for variance in plea-bargain decisions above and beyond the effects of the independent variables.[55] Thus, the preliminary step was to enter experimental variables (Probability of Trial Conviction, Delay until Trial, Waiting for Trial Location, and Factual Innocence) into a model predicting Subjective Trial Aversion scores (see Model 1 in SM 44).[56] Next, in Model 2, the demographic variable of Gender and Race were entered into the model. Model 2 was significantly better than Model 1 ($\chi^2(4) = 11.74$, $p < .05$; Model 1's AIC was 73373 and Model 2's AIC was 73369). Model 2's betas and standard errors can be seen in Table 23.

Next, in Model 3, the controls of Personal Involvement and Behavioral Personal Involvement were entered into Model 2.[57] Models 2 and 3 did not differ in their

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[55] Like in Studies 1 and 2, to reduce the tables referenced in this section, the statistical information for any steps in the hierarchical regressions conducted that did *not* produce a significant improvement in the model were placed in supplemental materials.
[56] Unlike Study 1, the starting point was a multiple regression testing the four-way interaction between all four experimental factors.
[57] Perceived Stress was left out since it was nonsignificant as a main effect in previous analyses.

predictive utility ($\chi^2(2) = 2.49$, $p = .29$); Model 3's AIC was 72510, which was higher than Model 2's AIC 72508,[58] and neither Personal Involvement nor Behavioral Personal Involvement were significant predictors, so they were left out in the next model. Model 3's betas and standard errors can be found in SM 45.

Next, in Model 4, the individual-difference measure of Impulsivity (interacted with Probability of Trial Conviction) was added to Model 2 (not Model 3 because it offered no added predictive utility). Models 4 was significantly better than Model 2 ($\chi^2(2) = 43.13$, $p < .001$; Model 2's AIC was 73369 and Model 4's AIC was 73330). Model 4's betas and standard errors can be seen in Table 24.

Next, in Model 5, the situated-person variables of Blameworthiness and Perceived Innocence[59] (each interacted with Probability of Trial Conviction) were added to Model 4. Adding these variables significantly increased the Model's predictive utility ($\chi^2(4) = 39.69$, $p < .001$; Model 4's AIC was 73330 and Model 5's AIC was 73298). Model 5's betas and standard errors can be seen in Table 25.

Discussion

Overall, Study 3 provided the opportunity to test a new situation variable, Factual Innocence, which is psychologically and legally relevant to plea-bargain decision-making. As the third study in a series of studies testing similar experimental manipulations and measuring similar person variables, this study arguably acts as a tie-breaker when Studies 1 and 2 provided conflicting findings, and when Studies 1 and 2

[58] Model 2 has a different AIC here than the previous paragraph because it's a slightly different dataset due to model comparisons only being possible on datasets of the same length—and because there was some missing data in the Personal Involvement measures a new dataset had to be run with Model 2.
[59] The composite score was used in this model.

provide consistent findings, this study reproduces those findings on a new sample to further increase confidence in their robustness. This discussion section will describe the impact of the following predictor categories on Subjective Trial Aversion: (1) situation variables including the experimental factor of Factual Innocence, (2) person variables, including demographic and trait-level individual differences, and (3) situated-person variables, including Blameworthiness and Perceptions of Innocence. Procedural justice will be discussed at the end as a bridge to Study 4, which uses insights from the present study's findings to include Procedural Justice as a formal outcome variable.

Situation Variables

Consistent with Clatch and Borgida's (2021) findings and Study 2 of this dissertation, the present study's findings suggest that increases in Probability of Trial Conviction result in more accepted plea bargains; increases in Delay until Trial result in more accepted plea bargains (especially in the Jail condition when Probability of Conviction is 50% or lower; see Figure 20 for Study 2's data and Figure 28 for Study 3's data); and waiting in jail for trial results in more accepted plea bargains. Additionally, the present study replicated the three-way interaction among these variables that was first found by Clatch and Borgida (2021; Study 3) and then confirmed in Study 2 of this dissertation.[60] Replication of these findings across various online sampling platforms (now MTurk, Lucid, and Prolific) and using different measurement methods (this study expanded the range of Subjective Trial Aversion scores further by increasing the first

[60] The re-writing of the plea-bargain decision-making task to make the Wait-for-Trial Location more prominent than in Studies 1 and 2 may be the cause of the increase (from 52% and 54% to 72%) in Jail-condition participants correctly reporting that they were in jail.

plea-bargain offer from 60 to 120 days in prison) increases confidence in the reliability of the findings. Moreover, Study 2's nationally representative sample followed by the present study's oversample of Black Americans argues for generalizability of these findings.

But Delay, Probability, and Waiting-for-Trial Location were not the only situation variables manipulated in the present study. The Factual Innocence manipulation provided the ability to test whether innocent and guilty criminal defendants respond to the plea-bargaining process differently. The answer is that largely, innocent and guilty criminal defendants respond to the plea-bargaining process in very similar ways with a small but detectable group-mean difference in plea-bargain decision-making such that guilty participants accept more pleas. Because the titration procedure requires participants to make a series of decisions, not only is Subjective Trial Aversion a measure of how many times they would be willing to accept a plea (as opposed to trial) but it is also a measure of how harsh of a plea they would be willing to accept to avoid trial because the plea-option's criminal sanction increases each time the participant accepts a plea, so guilty participants accepted harsher pleas on average than innocent participants.

In that context, it is striking that nearly a third of Innocent participants (29.38%, 47 of 160 participants in the innocent condition) accepted the plea every time it was offered despite the fact that the associated criminal sentence increased to be nearly as harsh (i.e., just a 3-day difference) as trial's criminal sentence. And this rate only increased by 11% in Guilty participants: 41.28% accepted the plea every time it was offered. On the other end, 11.63% of Guilty participants exercised their trial right every

time a plea bargain was offered, and this rate only increased by 4% in Innocent participants: 15.63% chose the trial option every time it was offered.

And these different rates of all-trial and all-plea plea-bargaining strategies between innocent and guilty participants is what, likely, accounts for the present study's confirmation of the "guilty hypothesis" as tested by mean differences—that guilty participants, on average, accept more plea-bargains than innocent participants. Figure 25 shows the largely overlapping distributions of the two groups (innocent and guilty participants), in all of the histogram's bars except the two bars capturing the all-trial and all-plea plea-bargaining strategies.[61]

Moreover, this main-effect difference between innocent and guilty participants is qualified by an interaction with the most robust situational feature in this dissertation's research: Probability of Trial Conviction. In particular, innocent participants were especially influenced to accept pleas once their likelihood of being falsely convicted at trial was higher than 50% (see Figure 26's nearly intersecting lines at higher probabilities).

Person Variables

Demographic Variables

Study 3 suggests that Education- and Gender-based differences in plea-bargain decisions are not highly reliable. Both Study 2 and 3 failed to replicate Study 1's finding that college graduates chose to go to trial more often than other groups. Study 3 also failed to replicate that men go to trial more often than women.

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[61] Note, however, that those outer bars capture more than just the all-trial strategy corresponding to STA = 3 and the all-plea strategy corresponding to STA = 237.

The present study was also the first study in this dissertation research to find that there are race differences in plea-bargain decision-making, and this may be due to the oversample of people of color enabling large enough sub-groups to power the comparisons. Unfortunately, Study 3 did not find any differences in the racial groups' life or legal experiences that explain the findings, and this may be because the legal experience questions do not tap the right constructs, or it may be because there is cross-race consensus in perceptions of the criminal justice system. The present study, however, did find that Blacks' stronger preference for trial can be explained by a variety of situational features.

First, Black participants' exhibited relative *in*sensitivity to their likelihood of trial conviction relative to Whites (see Table 21 for statistical results and Figure 23 for the graphical representation). To my knowledge, no research to date directly explains this. However, because there were a variety of situational variables manipulated in the present study's experimental context, and in order to fully query the data, two three-way interactions among Probability of Trial Conviction, Race, and other experimental variables were conducted. Specifically the first three-way interaction involved Factual Innocence and the second involved Waiting-for-Trial Location (see Table 21 for statistical results and Figure 24's two panels).

Figure 24's top panel shows that being White and innocent made people more responsive to the likelihood of their conviction at trial. So Innocent-White participants were sensitive to the environmental cue of probability of trial conviction to make their decisions relative to Guilty-White and all Black participants. At low likelihoods of losing at trial, they chose to go to trial more, and at high likelihoods of losing at trial, they

accepted the plea more. Additionally, Figure 24's bottom panel shows that being Black and waiting in jail made people less responsive to the likelihood of their conviction at trial. So Black-Jail participants resisted the environmental cue of probability of trial conviction to make their decisions relative to Black-Bail participants and all White participants. This can be interpreted as a form of reactance. Knowing that they are a member of a group that is overrepresented in the criminal justice system and then being told that their likelihood of conviction at trial is increasing (in subsequent within-participants blocks within the experimental paradigm) and that they are awaiting trial in jail, they respond by resisting the plea offer more than other groups.

Together, these three-way interactions suggest that the initially-observed difference in Blacks' and Whites' extent of probability discounting may be attributable to different reactions to other situational cues (factual innocence for Whites and waiting in jail pre-trial for Blacks).

Trait-Level Individual-Difference Variable: Impulsivity

Study 3's null Impulsivity-main-effect finding is consistent with Study 2's null effect and suggests that Study 1's finding that higher impulsivity was related to a preference for trial may have been anomalous. If this is the case, it would suggest that impulsivity does not influence plea-bargain decisions directly, encouraging people either to choose to go to trial or accept the plea more often. Moreover, across all three of the studies to this point, impulsivity interacts with probability of trial conviction to predict plea-bargain decisions. And the direction of the effect is the same: For lower-impulsivity participants, the likelihood of losing at trial is a stronger motivator for accepting pleas relative to higher-impulsivity participants, who still are influenced by probability of

losing at trial—just to a lesser degree. Figure 3 (Study 1), Figure 16 (Study 2), and Figure 29 (Study 3) all show this pattern, and the intersection point of the regression lines is consistently below 50%, suggesting that once it becomes equally likely that a participant will win or lose at trial, low-impulsivity participants are more uncomfortable with that risk than high-impulsivity participants.

Last, Study 1's finding that impulsivity interacts with delay until trial to predict plea-bargain decisions did not replicate in Study 2 or Study 3, which taken together with the robust Impulsivity-by-Probability effects, suggest that Impulsivity's effect in plea bargaining is mostly about risk aversion not aversion to delayed outcomes.

Situated-Person Variables

Blameworthiness

The hypothesized effects involving Blameworthiness have been consistently significant across all three dissertations studies. First, Study 3 replicates Study 1 and Study 2's finding that participants who blame themselves more for the injury and car accident accept more (and harsher) pleas. Additionally, Study 3 replicates the two previous studies' findings that, counter to the hypothesized null effect, self-blame interacts with probability of losing at trial to predict plea-bargain decisions. Figure 32 shows the interaction plot for Studies 1–3, showing both Study 2's Original and Wider data since Study 1 used the Original titration and Study 3 used the Wider titration. The exact nature of the interaction varies across studies, but in general, as probability of losing at trial increases the lines representing above- and below-median blameworthiness groups get closer or intersect. This suggests that as probability of trial conviction increases, participants' self-blame mattered less in their plea-bargain decisions.

Perceptions of Innocence

Study 3 replicated the finding from Studies 1 and 2 that participants who perceive themselves to be more guilty, accept more (and harsher) pleas. To determine the consistency of the findings of the interaction between Perceptions of Innocence and Probability of Trial Conviction, it is important to take into account how Perceptions of Innocence are measured, and in Study 2, how Subjective Trial Aversion was measured. Table 26 shows a summary of the findings across studies by how they were measured. The continuous measure of perceptions of guilt was the only variable with perfectly consistent results: when participants felt more guilt about the accident and injury, probability of trial conviction mattered less in participants' plea bargain-decisions. Presumably this is because once people have fairly intense feelings of guilt, they are accepting harsher pleas and the situational indicator of likelihood of conviction is a secondary concern to quelling feelings of guilt. In this sense, the situated-person variable of perceptions of guilt have primary psychological impact on plea-bargaining behavior and the situational variable of probability of trial conviction has secondary impact. The inconsistent findings regarding the continuous measure of perceptions of innocence and the continuous composite measure may be due to different samples or varying ranges in Subjective Trial Aversion (produces by Original vs. Wider procedures).

Limitations and Future Studies

Study 3 showed that factual innocence is not only important legally, but also psychologically important to plea-bargain decision-making, and Study 3 highlighted that Black and White participants react differently to factual innocence and waiting for trial in jail. However, comparing race-effects across between-participants variable levels reduces

the cell size of comparison groups. In particular, because Factual Innocence and Waiting-for-Trial Location were manipulated between participants, the conclusions regarding those variables' interactions with Probability of Trial Conviction and Race should be interpreted cautiously and retested in future studies.[62] Additionally, Studies 1–3 have focused entirely on a single dependent measure, Subjective Trial Aversion, and although this is the central behavioral variable of interest, the comprehensive psychological study of plea-bargaining should ideally involve more than a single outcome measure. To begin to address this, Study 4 will also test a series of hypotheses pertaining to perceptions of procedural justice.

Last, although Studies 1–3 have focused on producing internally valid scientific conclusions about plea-bargain decision-making, that focus is at the expense of a degree of external validity. Study 4 will shift its focus to prioritize external validity more than in Studies 1-3.

[62] Figure 24's top panel only summarizes data from 38 Black-Jail participants and 40 Black-Bail participants, and the bottom panel only summarizes data from 44 Black-Guilty participants and 34 Black-Innocent participants.

Table 18

Study 3 Demographics Regression Analyses

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2	95% *CI*
Gender			0.004	
Other	42.19*	20.47	0.004	(2.13, 82.2)
Women	3.59	5.88		(-7.92, 15.1)
Race			0.006	
Other	25.18*	9.81	0.006	(5.97,44.40)
White	11.88[m]	7.01	0.003	(-1.83, 25.6)
Age	0.19	0.24	0.001	(-0.28, 0.66)
Education			0.003	
High School	14.33	5.89		(-90.8, 119)
Part of College	4.56	53.55		(-99.9, 109)
College Graduate	3.06	53.41		(-101.1, 107)
Graduate School	15.08	53.53		(-89.3, 120)
Gender*PTC			0.32	
Other	50.27*	22.12	0.002	(6.99, 93.55)
Women	4.15	6.36		(-8.29, 16.59)
PTC	1.42***	0.03	0.19	(1.36, 1.47)
Other:PTC	-0.13	0.13		(-0.39, 0.13)
Women:PTC	-0.01	0.04		(-0.09, 0.07)
Gender*DUT			0.02	
Other	28.65	21.25	0.001	(-12.92, 70.22)
Women	3.76	6.11		(-8.18, 15.71)
DUT	0.48***	0.07	0.005	(-0.34, 0.63)
Other:DUT	0.83*	0.35	0.001	(0.15, 1.52)
Women:DUT	-0.01	0.10		(-0.21, 0.19)
Gender*DUT*WTL			0.04	
Other	54,08	38.55	0.001	(-21.02, 129.19)
Women	7.87	8.49	0.001	(-8.67, 24.42)
DUT	-0.002	0.10		(-0.20, 0.20)
Jail	12.66	8.62	0.001	(-4.13, 20.46)
Other:DUT	0.28	0.64		(-0.98, 1.54)
Women:DUT	-0.02	-0.14		(-0.30, 0.26)
Other:Jail	-39.30	45.85		(-128.63, 50.03)
Women:Jail	-8.10	11.95		(-31.38, 15.19)
DUT:Jail	-0.96***	0.14	0.005	(0.68, 1.24)
Other:DUT:Jail	0.50	0.77		(-1.01, 2.00)
Women:DUT:Jail	0.03	0.20		(-0.37, 0.42)
Education*PTC			0.32	
Middle School	-70.70	57.80	0.001	(-183.48, 42.08)
High School	2.12	11.15		(-19.65, 23.88)
Part of College	-25.54**	9.09	0.004	(-43.28, -7.80)
College Graduate	-19.92*	8.05	0.003	(-35.63, -4.22)
PTC	1.31***	0.04	0.10	(1.23, 1.38)
Middle School:PTC	0.89*	0.35		(.21, 1.58)
High School:PTC	-0.05	0.07	0.001	(-0.18, 0.09)
Part of College:PTC	0.24***	0.06	0.001	(0.13, 0.35)
College Graduate:PTC	0.13**	0.05	0.001	(0.03, 0.22)
Education*DUT			0.01	
Middle School	-18.34	55.54		(-126.71, 90.02)
High School	-0.86	10.72		(-21.77, 20.05)

Part of College	-10.55	8.74	0.001	(-27.60, 6.49)
College Graduate	-9.12	7.74	0.001	(-24.21, 5.97)
DUT	0.56***	0.10	0.004	(-.37, 0.76)
Middle School:DUT	0.20	0.91		(-1.59, 1.99)
High School:DUT	0.01	0.18		(-0.34, 0.35)
Part of College:DUT	0.002	0.14		(-0.28, 0.28)
College Graduate:DUT	-0.18	0.13		(-0.43, 0.07)
Education*DUT*WTL			0.04	
Middle School	-27.18	54.48		(-132.86, 78.50)
High School	1.10	14.16		(-26.38, 28.57)
Part of College	-3.27	12.64		(-27.78, 21.25)
College Graduate	0.14	10.85		(-20.91, 21.19)
DUT	0.08	0.14		(-0.20, 0.36)
Jail	18.81	11.85	0.002	(-4.17, 41.79)
Middle School:DUT	-0.23	0.91		(-2.01, 1.56)
High School:DUT	-0.10	0.24		(-0.57, 0.36)
Part of College:DUT	0.05	0.21		(-0.36, 0.47)
College Graduate:DUT	-0.21	0.18		(-0.57, 0.15)
High School:Jail	0.72	21.16		(-40.34, 41.77)
Part of College:Jail	-14.01	17.12		(-47.23, 19.21)
College Graduate:Jail	-17.37	15.11	0.001	(-46.68, 11.94)
DUT:Jail	0.91***	0.20	0.002	(0.52, 1.30)
High School:DUT:Jail	0.53	0.35		(-0.16, 1.22)
Part of College:DUT:Jail	-0.14	0.29		(-0.70, 0.42)
College Graduate:DUT:Jail	0.13	0.25		(-0.26, 0.63)
Race*PTC			0.33	
Other	3.67	10.61		(-17.08, 24.42)
White	-3.96	7.58		(-18.78, 10.87)
PTC	1.20***	0.04	0.08	(1.13, 1.28)
Other:PTC	0.35***	0.06	0.003	(0.22, 0.47)
White:PTC	0.25***	0.05	0.003	(0.16, 0.35)
Race*DUT			0.02	
Other	20.64*	10.19	0.003	(0.70, 40.57)
White	12.99 [m]	7.28	0.002	(-1.25, 27.23)
DUT	0.50***	0.10	0.003	(0.30, 0.70)
Other:DUT	0.28 [m]	0.17		(-0.05, 0.61)
White:DUT	-0.07	0.12		(-0.30, 0.17)

Note. The R^2 column presented in the above table when representing simple linear regressions is equal to R^2_m. The same column, when representing multiple linear regressions is the partial coefficient. Anything less than 0.01 is excluded from the table.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001

Table 19

Study 3 Procedural Justice Regressions

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
Race			0.02	
Other	-0.33[m]	0.17		(-0.66, 0.005)
White	0.09	0.12		(-0.15, 0.33)
Gender			0.01	
Other	-0.23	0.36		(-0.94, 0.47)
Women	-0.13	0.10		(-0.33, 0.07)
Age	0.004	0.004	0.00	(-0.005, 0.01)
Education			0.03	
High School	1.21	0.92		(-0.61, 3.03)
Part of College	0.88	0.92		(-0.91, 2.69)
College Graduate	1.23	0.92		(-0.57, 3.03)
Graduate School	1.30	0.92		(-0.50, 3.11)
Legal Experience			0.01	
Civil	0.05	0.20		(-0.34, 0.44)
Criminal	-0.29	0.21		(-0.71, 0.13)
None	-0.08	0.19		(-0.42, 0.26)
Silent	0.01	0.36		(-0.70, 0.73)
Criminal Legal Experience			0.00	
Own	-0.08	0.16		(-0.39, 0.24)
Both	-0.15	0.16		(-0.46, 0.17)
Trust of Real-World Judge	0.01**	0.003	0.06	(0.003, 0.02)
Trust of Real-World Lawyer	0.01[m]	0.003	0.02	(-0.007, 0.01)
Overall Eval. of Legal Syst. Exper.	0.01**	0.003	0.06	(0.003, 0.02)
Factual Innocence	-0.50***	0.10	0.07	(-0.70, -0.31)
Perceptions of Innocence (contin)	-0.005***	0.0006	0.15	(-0.01, -0.00)
WTL Jail	-0.27**	0.10	0.02	(-0.47, -0.08)
STA*Perceptions of Innocence (contin)			0.15	
STA	0.003	0.009		(-0.002, 0.002)
Perceptions of Innocence	-0.01***	0.002		(-0.01, -0.002)
STA:Perceptions of Innocence	0.000004	0.00001		(-0.00002, 0.00003)
STA*Factual Innocence			0.09	
STA	0.003**	0.001		(0.009, 0.01)
Innocent	-0.003	0.28		(-0.56, 0.56)
STA:Innocent	-0.002[m]	0.001		(-0.01, 0.004)

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001

Table 20

Study 3 Race Regressions

	Subjective Trial Aversion		
Models/Variables	*B*	*SE*	*95% CI*
Legal Experience Overall ~ Race			
Other	10.92	9.19	(-7.25, 29.09)
White	0.04	5.35	(-10.54, 10.62)
Legal Experience Judge Trust ~ Race			
Other	7.37	9.30	(-11.04, 25.77)
White	-4.01	5.42	(-14.72, 6.71)
Legal Experience Lawyer Trust ~ Race			
Other	-2.01	9.15	(-20.12, 16.09)
White	-5.28	5.33	(-15.82, 5.27)
Personal Involvement Adject ~ Race			
Other	-1.13*	0.50	(-2.12, -0.15)
White	-0.29	0.36	(-0.99, 0.41)
Personal Involvement Behavior ~ Race			
Other	-1.33	1.06	(-3.01, 0.75)
White	-1.33[m]	0.75	(-2.81, 0.15)
Personal Involvement Behavior ~ Age*Race			
Age	-0.01	0.05	(-0.11, 0.10)
White	3.05	2.67	(-2.22, 8.31)
Age:Race	-0.10	0.06	(-0.23, 0.02)
Personal Involvement Adject. ~ Age*Race			
Age	-0.02	0.03	(-0.07, 0.03)
White	-3.13*	1.30	(-5.69, -0.56)
Age:Race	0.06*	0.03	(0.003, 0.12)
Factor.Importance_composite ~ Race			
Other	-3.12*	1.45	(-5.96, -0.27)
White	-4.32***	1.03	(-6.35, -2.29)
STA ~ Race*Personal Involvement Adject.			
Personal Involvement	2.95	2.38	(-1.70, 7.59)
Race_Other	94.50	64.53	(-31.19, 220.18)
Race_White	101.26*	47.37	(9.00, 193.53)
Personal Involvement*Race_Other	-4.10	3.85	(-11.60, 3.41)
Personal Involvement* Race_White	-5.22[m]	2.73	(-10.54, 0.09)

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001

Table 21

Study 3 Subjective Trial Aversion Race Regressions

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
Race*PTC			0.33	
PTC	1.20***	0.04	0.08	(1.13, 1.28)
Race [Other]	3.67	10.61		(-17.08, 24.4)
Race [White]	-4.00	7.58		(-18.78, 24.42)
PTC:Other	0.35***	0.06	0.003	(0.22, 0.47)
PTC:White	0.25***	0.05	0.003	(0.16, 0.35)
Race*DUT			0.02	
DUT	0.50***	0.10	0.003	(0.30, 0.70)
Race [Other]	20.64*	10.19	0.003	(0.70, 40.57)
Race [White]	12.99[m]	7.28	0.002	(-1.25, 27.23)
DUT:Other	0.28[m]	0.17		(-0.05, 0.61)
DUT:White	-0.07	0.12		(-0.30, 0.17)
Race*Factual Innocence			0.02	
Innocent	-21.00[m]	11.86	0.003	(-44.10, 2.1)
Race [Other]	18.71	14.01	0.002	(-8.57, 46.0)
Race [White]	13.99	9.29	0.002	(-4.11, 32.1)
Innocent:Other	16.24	19.48	0.001	(-21.70, 54.2)
Innocent:White	-2.42	13.88		(-29.45, 24.6)
Race*WTL			0.02	
Jail	9.05	11.67	0.001	(-13.69, 31.8)
Race [Other]	14.42	14.36	0.001	(-13.54, 42.4)
Race [White]	2.00	9.59		(-16.67, 20.7)
Jail:Other	16.78	19.35	0.001	(-20.90, 54.5)
Jail:White	19.53	13.69	0.002	(-7.12, 46.2)
Race*DUT*PTC			0.35	
PTC	1.31***	0.05	0.06	(1.22, 1.41)
Race [Other]	-14.59	11.22	0.001	(-36.53, 7.35)
Race [White]	-5.62	8.01		(-21.29, 10.05)
DUT	9.19***	1.41	0.004	(6.42, 11.95)
PTC:Other	0.57***	0.08	0.004	(0.41, 0.73)
PTC:White	0.30***	0.06	0.002	(0.19, 0.41)
PTC:DUT	-0.07***	0.02	0.001	(-0.11, -0.03)
DUT:Other	11.25***	2.31	0.002	(6.72, 15.78)
DUT:White	1.05	1.65		(-2.19, 4.28)
PTC:Other:DUT	-0.14***	0.03	0.002	(-0.20, -0.07)
PTC:White:DUT	-0.03	0.02		(-0.07, 0.02)
Race*WTL*PTC			0.34	
PTC	1.35***	0.05	0.05	(1.23, 1.46)
Race [Other]	-5.90	15.57		(-36.24, 24.45)
Race [White]	-4.90	10.40		(-25.16, 15.36)
Jail	27.44*	12.66	0.002	(2.78, 52.11)
PTC:Other	0.33***	0.10	0.001	(0.14, 0.52)
PTC:White	0.11[m]	0.06		(-0.02, 0.24)
PTC:Jail	-0.30***	0.08	0.001	(-0.45, -0.14)
Jail:Other	11.63	20.98		(-29.26, 52.52)
Jail:White	1.19	14.84		(-27.73, 30.12)
PTC:Other:Jail	0.08	0.13		(-0.17, 0.34)
PTC:White:Jail	0.29**	0.09	0.001	(0.11, 0.48)
Race*WTL*DUT			0.04	

DUT	0.21	1.42		(-2.58, 3.00)
Race [Other]	13.17	14.92		(-15.90, 42.24)
Race [White]	2.97	9.96		(-16.45, 22.38)
Jail	-6.89	12.13		(-30.52, 16.74)
DUT:Other	0.77	2.51		(-4.14, 5.69)
DUT:White	-0.60	1.67		(-3.88, 2.69)
DUT:Jail	9.82***	2.04	0.003	(5.83, 13.82)
Jail:Other	13.89	20.11		(-25.29, 53.07)
Jail:White	20.22	14.23	0.001	(-7.50, 47.93)
DUT:Other:Jail	1.78	3.38		(-4.84, 8.40)
DUT:White:Jail	-0.41	2.39		(-5.10, 4.27)
Race*Factual Innoc*PTC			0.34	
PTC	1.28***	.05	.052	(1.18, 1.38)
Race [Other]	.92	15.16		(-28.63, 30.46)
Race [White]	15.87	10.06	.001	(-3.73, 35.46)
Innocent	-9.76	12.84		(-34.78, 15.25)
PTC:Other	0.29**	.09	.001	(-0.10, 0.47)
PTC:White	-0.03	.06		(-0.15, 0.09)
PTC:Innocent	-0.18*	.08		(-0.34, -0.03)
Innocent:Other	7.11	21.08		(-33.98, 48.19)
Innocent:White	-40.35**	15.02	0.003	(-69.63, -11.07)
PTC:Other:Innocent	.14	.13		(-0.11, 0.40)
PTC:White:Innocent	.61***	.09	.004	(0.43, 0.79)
Race*Factual Innoc*DUT			0.03	
DUT	2.66[m]	1.37		(-0.02, 5.34)
Race [Other]	11.94	14.56		(-16.43, 40.31)
Race [White]	11.96	9.66	0.001	(-6.86, 30.77)
Innocent	-29.69*	12.33	0.004	(-53.71, -5.68)
DUT:Other	4.17[m]	2.45		(-0.62, 8.96)
DUT:White	1.25	1.62		(-1.93, 4.43)
DUT:Innocent	5.36**	2.07	0.001	(1.30, 9.41)
Other:Innocent	22.18	20.25		(-17.27, 61.62)
White:Innocent	4.91	14.43	0.001	(-23.20, 33.02)
DUT:Other:Innocent	-3.66	3.40		(-10.32, 3.002)
DUT:White:Innocent	-4.52	2.42		(-9.26, 0.23)
Race*WTL*Factual Innoc			0.04	
Jail	7.01	15.49		(-22.9, 36.90)
Other	3.83	18.79		(-32.4, 40.10)
White	6.54	11.95		(-16.5, 29.61)
Innocent	-30.55[m]	16.74	0.003	(-62.9, 1.76)
Jail:Other	28.49	27.39	0.001	(-24.4, 81.34)
Jail:White	14.82	18.29	0.001	(-20.5, 50.12)
Jail:Innocent	14.10	23.44		(-31.1, 59.34)
Other:Innocent	30.34	28.62	0.001	(-24.9, 85.56)
White:Innocent	-3.17	19.48	0.001	(-40.8, 34.42)
Jail:Other:Innocent	-29.42	38.64	0.001	(-104.0, 45.16)
Jail:White:Innocent	2.96	27.33		(-49.8, 55.70)

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 22

Study 3 Hypothesized Relation Regressions

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
PTC	1.41***	0.01	0.32	(50.85, 63.22)
DUT	0.50***	0.05	0.01	(0.40, 0.59)
WTL	24.33***	5.69	0.02	(13.2, 35.5)
PTC*DUT			0.34	
PTC	1.58***	0.02	.29	(1.53, 1.63)
DUT	11.41***	0.69	.03	(10.06, 12.75)
PTC:DUT	-0.10***	0.009	.02	(-0.12, -0.09)
PTC*WTL			0.34	
PTC	1.46***	0.03	.21	(1.40, 1.51)
Jail	29.89***	6.17	0.01	(17.81, 41.98)
PTC:Jail	-0.09*	0.04		(-0.17, -0.01)
DUT*WTL*PTC			0.37	
DUT	1.12	0.96	0.15	(30.91, 49.09)
Jail	-2.89	6.51	0.02	(-0.76, 3.00)
PTC	1.49***	0.03	0.01	(-15.63, 9.85)
DUT:Jail	20.25***	1.34		(1.42, 1.55)
DUT:PTC	-0.02	0.01		(-0.05, 0.01)
Jail:PTC	0.18***	0.05		(0.09, 0.27)
DUT:Jail:PTC	-0.17***	0.02		(-0.20, -0.13)
Blameworthiness	0.26***	0.04	0.03	(0.18, 0.34)
Blame*PTC			0.35	
PTC	1.59***	0.04	0.11	(1.49, 1.66)
Blameworthiness	0.34***	0.05	0.02	(0.25, 0.43)
PTC:Blame	-0.001***	0.0002		(-0.002, -0.0007)
Factual Innocence	-19.05**	5.75	0.01	(-30.3, -7.77)
Factual Innocence*WTL			0.03	
Innocent	-28.32***	8.03	0.01	(-44.00, -12.6)
Jail	20.47**	7.76	0.01	(5.30, 35.6)
Innocent:Jail	12.72	11.21		(-9.18, 34.6)
Factual Innocence*PTC			0.33	
Innocent	-33.82***	4.32	0.18	(-46.02, -21.62)
PTC	1.30***	.03	0.01	(1.24, 1.35)
Innocent:PTC	0.24***	.04		(0.16, 0.31)
Innocence_Categ			.03 .26	
Guilty	41.46***	7.59	.03	(26.60, 56.30)
Between	22.28**	8.23	.007	(6.17, 38.40)
Perception of Innocence	-0.51***	0.07	0.04	(-0.65, -0.36)
Perception of Guilt	0.47***	0.07	0.03	(0.33, 0.61)
Percepts. of Innoc. [Composite]	-0.26***	0.04	0.04	(-0.33, -0.19)
PTC*Perceptions of Innocence			0.36	
PTC	1.38***	0.03	0.17	(1.32, 1.43)
Innocence	-0.56***	0.08	0.03	(-0.71, -0.40)
PTC:Innocence	0.0008	0.0005		(-0.0002, 0.002)
PTC*Perceptions of Guilt			0.35	
PTC	1.55***	0.03	0.16	(1.48, 1.62)
Guilt	0.62***	0.08	0.03	(0.47, 0.78)
PTC:Guilt	-0.002***	0.0005		(-0.003, -0.001)
PTC* Percepts. of Innoc. [Composite]			0.36	

PTC	1.42***	0.02	0.34	(1.38, 1.46)
Innocence	-0.31***	0.04	0.02	(-0.39, -0.23)
PTC:Innocence	0.0009***	0.0002		(0.0004, 0.001)
Impulsivity	0.11	0.82	0.00002	(-1.49, 1.71)
Impulsivity*PTC			0.32	
Imp	2.29**	0.88	0.14	(0.56, 4.02)
PTC	1.65***	0.04	0.01	(1.57, 1.73)
Imp:PTC	-0.03***	0.005	0.01	(-0.05, -0.02)
Impulsivity*DUT			0.01	
Imp	0.17	0.84		(-1.49, 1.83)
DUT	0.52***	0.11		(0.31, 0.73)
Imp:DUT	-0.004	0.01		(-0.03, 0.02)
Impulsivity*Factual Innocence			0.01	
Imp	-0.32	1.14		(-2.54, 1.91)
Innocent	-22.93[m]	12.36		(-47.07, 1.22)
Imp:Innocent	0.57	1.61		(-2.58, 3.72)
Impulsivity*DUT*WTL			0.04	
Imp	0.15	1.18		(-2.16, 2.45)
DUT	-0.07	0.15		(-0.37, 0.23)
Jail	7.67	12.70		(-17.15, 32.49)
Imp:DUT	0.01	0.02		(-0.03, 0.05)
Imp:Jail	0.01	1.66		(-3.15, 3.33)
DUT:Jail	1.14***	0.21	0.002	(0.72, 1.55)
Imp:DUT:Jail	-0.02	0.03		(-0.08, 0.03)
Legal Experience [Own]			0.00	
Civil	0.74	11.49		(-21.7, 23.2)
Criminal	-5.02	12.31		(-29.0, 19.0)
None	3.74	9.94		(-15.7, 23.1)
Silent	14.64	20.97		(-26.3, 55.6)
Criminal Justice System Experience			0.00	
Own	-5.93	9.26		(-24.1, 152.8)
Both	-6.40	9.26		(-24.5, 11.7)

Note. An R^2 statistic for the marginal (i.e., fixed effects) is provided and denoted as "R^2_m". The multiple regression predictor parameters' semi-partial correlations that are greater than or equal to .001 appear in the R^2_m column but in the rows of each parameter rather than the model-specification row.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001

Table 23

Study 3 Cross-Construct Multiple Regression Model 2

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Model 2			0.39	0.65	
PTC	1.38***	0.04	0.11		(1.31, 1.45)
DUT	0.11	0.10			(-0.07, 0.30)
Jail	-0.20	6.39			(-12.64, 12.3)
Factually Innocent	-38.73***	6.01	0.02		(-50.43, -27.0)
Gender [Other]	35.52^m	19.55	0.01		(-2.51, 73.5)
Gender [Women]	5.94	5.60			(-4.95, 16.8)
Race[Other]	24.63**	9.45	0.01		(6.26, 43.0)
Race[White]	13.03^m	6.68			(0.04, 26.0)
PTC:DUT	-0.002	0.001			(-0.005, 0.0006)
PTC:Jail	0.15**	0.05			(0.06, .25)
DUT:Jail	2.02***	0.13	0.02		(1.76, 2.29)
PTC:Factually Innocent	0.25***	0.04			(0.18, 0.32)
PTC:DUT:Jail	-0.02***	0.00			(-0.02. -0.01)

Table 24

Study 3 Cross-Construct Multiple Regression Model 4

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Model 4			0.39	0.65	
PTC	1.62***	0.05	0.08		(1.51, 1.72)
DUT	0.11	0.10			(-0.07, 0.30)
WTL	-0.03	6.39			(-12.45, 12.4)
Factually Innocent	-37.98***	6.02	0.02		(-49.70, -26.3)
Gender [Other]	35.51^m	19.58	0.01		(-2.51, 73.5)
Gender [Women]	5.94	5.61			(-4.95, 16.8)
Race[Other]	24.65**	9.46	0.01		(6.27, 43.00)
Race[White]	13.06^m	6.71	0.01		(0.04, 26.1)
Impulsivity	2.03*	0.84			(0.40, 3.65)
PTC:DUT	-0.002	0.001			(-0.005, 0.0006)
PTC:WTL	0.15**	0.05			(0.06, 0.24)
DUT:WTL	2.02***	0.13	0.02		(1.76, 2.29)
PTC: Factually Innocent	0.24***	0.04			(0.16, 0.31)
PTC:Impulsivity	-0.03***	0.01			(-0.04, -0.02)
PTC:DUT:WTL	-0.02***	0.00	0.01		(-0.02, -0.01)

Table 25

Study 3 Cross-Construct Multiple Regression Model 5

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Model 5			0.42	0.65	
PTC	1.79***	0.08	0.04		(1.55, 1.86)
DUT	0.11	0.10			(-0.07, 0.30)
WTL	-0.93	6.15			(-12.85, 11.00)
Factually Innocent	-15.62*	6.90			(-28.99, -2.26)
Gender [Other]	24.71	18.67			(-11.44, 60.86)
Gender [Women]	4.74	5.32			(-5.56, 15.04)
Race[Other]	26.70**	8.98	0.01		(9.31, 44.08)
Race[White]	13.44*	6.38	0.01		(1.08, 25.80)
Impulsivity	2.07*	0.80			(0.51, 3.62)
Blameworthiness	0.14*	0.07			(0.00, 0.28)
Perceptions of Innocence	-0.16*	0.07			(-0.30, -0.03)
PTC:DUT	-0.002	0.001			(-0.005, 0.0006)
PTC:WTL	0.15**	0.05			(0.06, 0.25)
DUT:WTL	2.02***	0.13	0.01		(1.76, 2.29)
PTC:Factually Innocent	0.22***	0.04			(0.14, 0.31)
PTC:Impulsivity	-0.03***	0.05			(-0.04, -0.02)
PTC:Blameworthiness	-0.0007	0.0005			(-0.002, 0.0002)
PTC:Perceptions of Innocence	0.0004	0.0004			(-0.001, 0.0004)
PTC:DUT:WTL	-0.02***	0.001	0.01		(-0.02, -0.01)

Table 26

Three-Study Perceptions of Innocence*Probability of Trial Conviction Comparison

	Study 1 (original)	**Study 2 (original)**	**Study 2 (wider)**	**Study 3 (wider)**
Ordinal Innocence	ns[63]	ns[64]	ns[65]	sig. pos.[66]
Continuous Innocence	not measured	sig. neg.[67]	ns[68]	ns[69]
Continuous Guilt	not measured	sig. neg.[70]	sig. neg.[71]	sig. neg.[72]
Continuous Composite (Innocence – Guilt)	not measured	ns[73]	ns[74]	sig. pos.[75]

[63] See Table 4's statistics.
[64] See SM 25 for statistics.
[65] See SM 25 for statistics.
[66] $B = .07$, $SE = .03$, $p < .01$
[67] $B = -.0008$, $SE = .0003$, $p < .01$
[68] $B = .0005$, $SE = .0005$, $p > .1$
[69] See Table 22 for statistics.
[70] $B = -.0007$, $SE = .0003$, $p < .05$
[71] $B = -.001$, $SE = .0005$, $p < .01$
[72] See Table 22 for statistics.
[73] $B = -.000007$, $SE = .0001$, $p > .1$
[74] $B = .0003$, $SE = .0003$, $p > .1$
[75] See Table 22 for statistics.

Figure 21

Study 3 Subjective Trial Aversion by Race

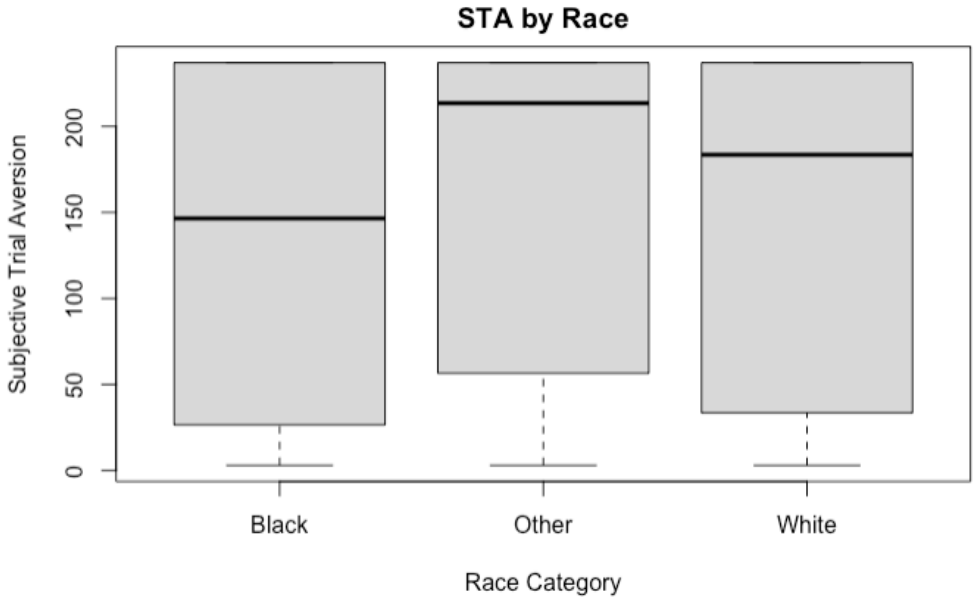


Figure 22

Study 3 Procedural Justice and Subjective Trial Aversion

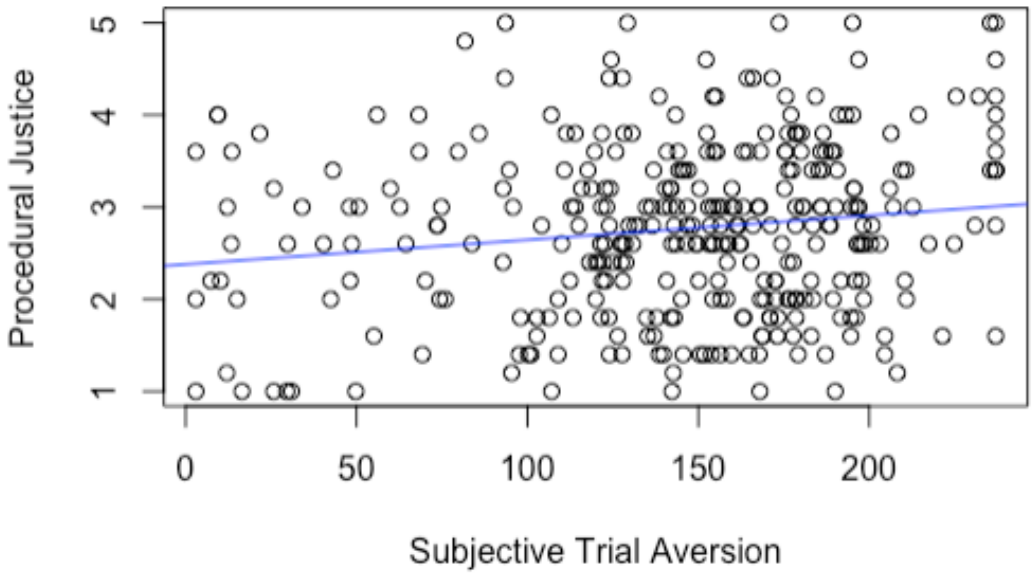


Figure 23

Study 3 Probability of Trial Conviction Interaction with Race

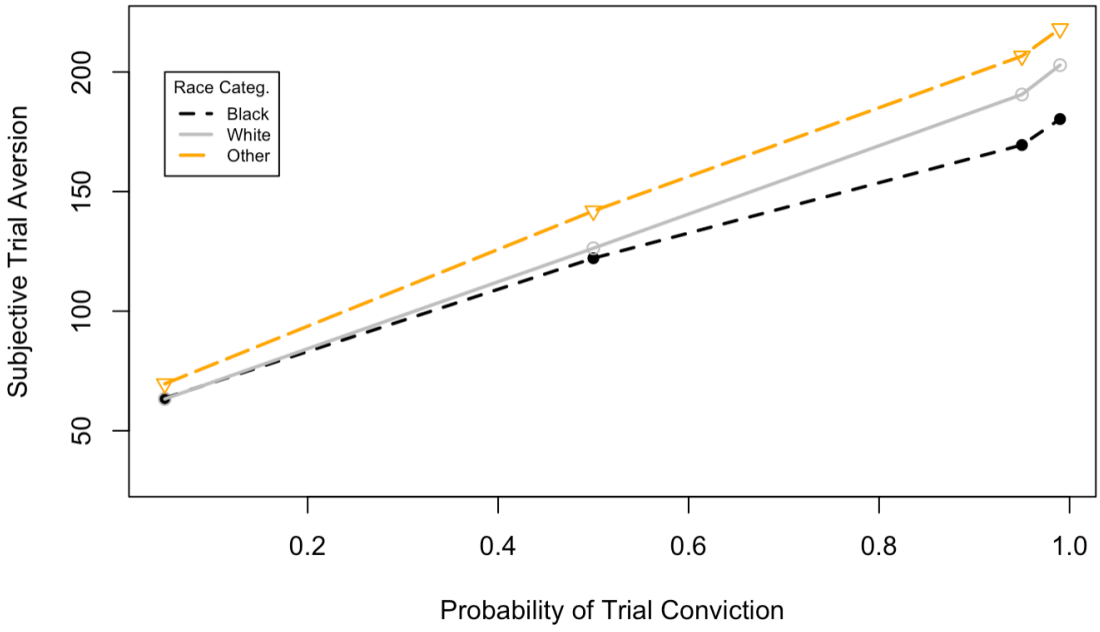
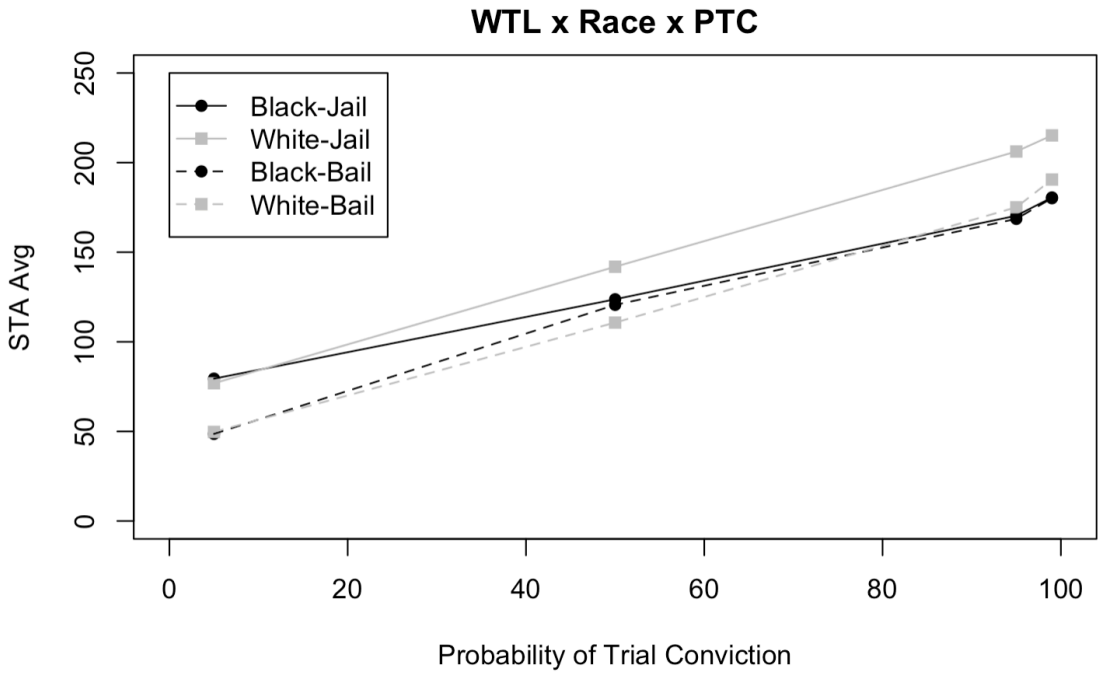


Figure 24

Study 3 Probability of Trial Conviction Interactions with Race



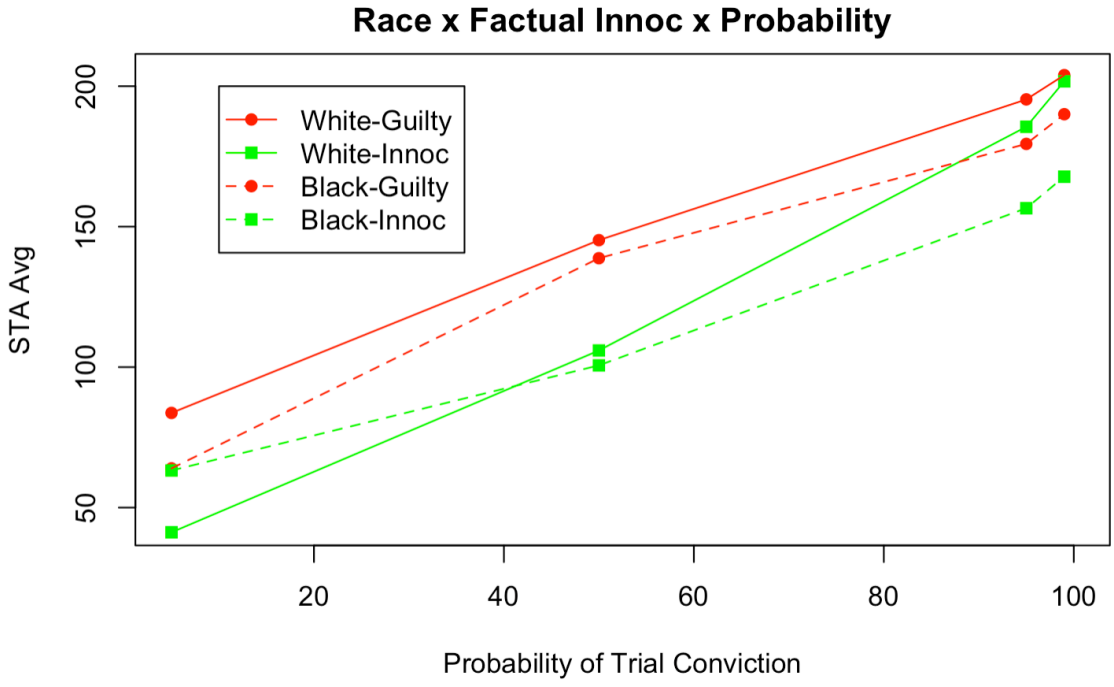


Figure 25

Study 3 Subjective Trial Aversion's Overlapping Histograms by Factual Innocence

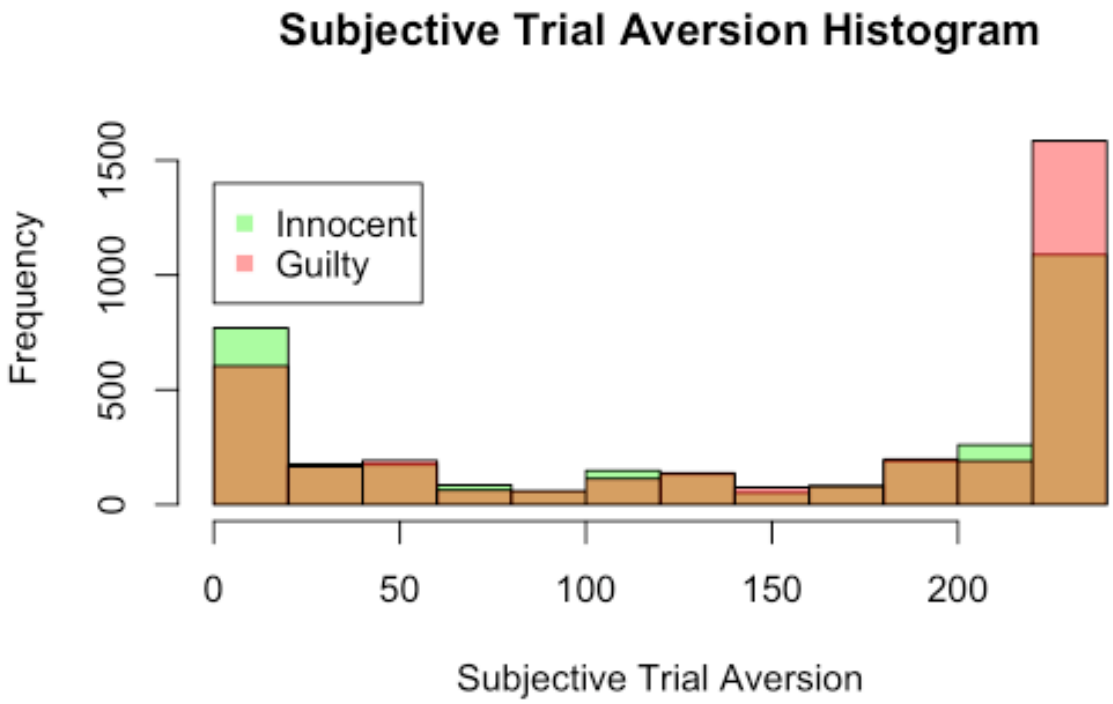


Figure 26

Study 3 Factual Innocence and Probability of Trial Conviction Interaction

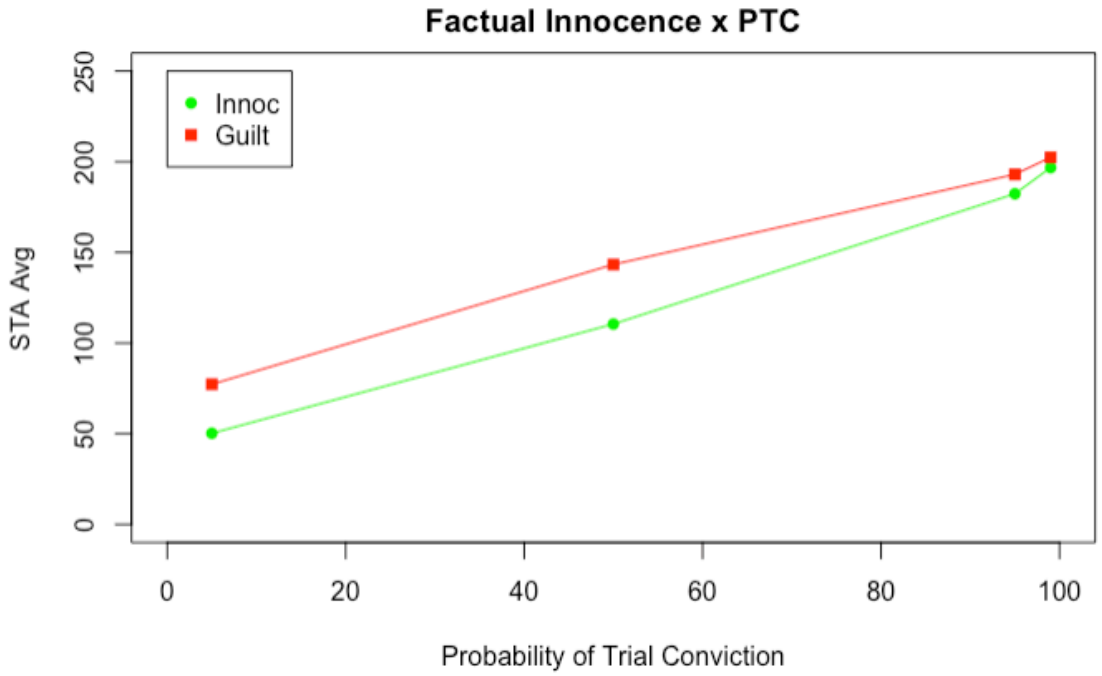


Figure 27

Study 3 Factual Innocence and Waiting-for-Trial Location Interaction

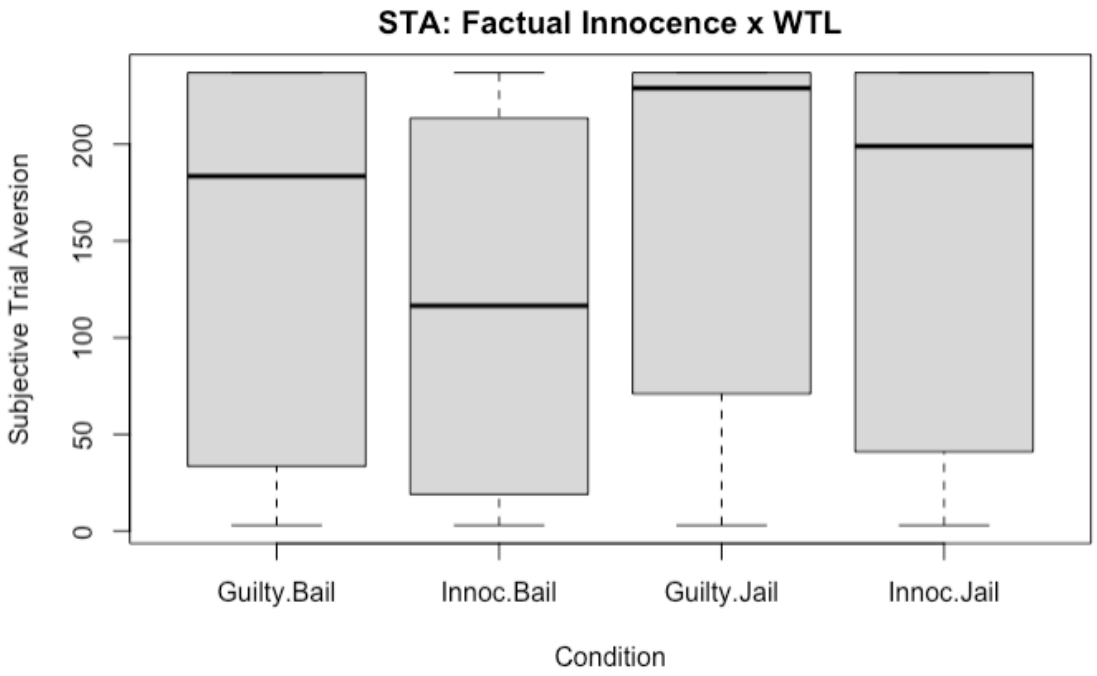


Figure 28

Study 3 WTL*PTC*DUT

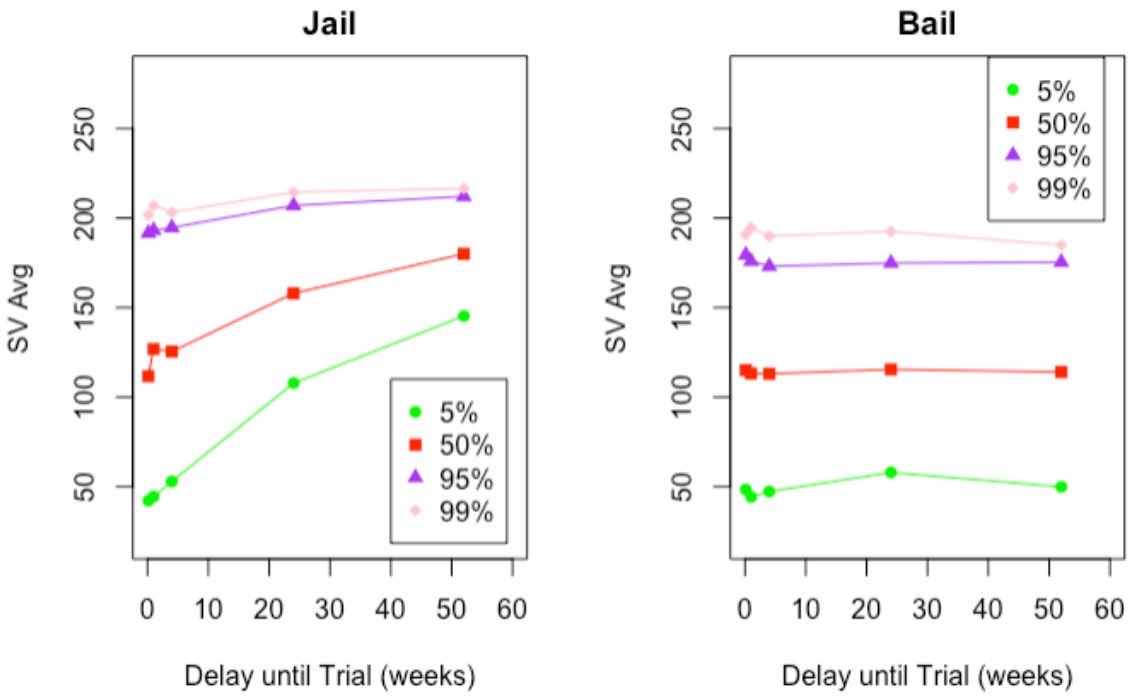


Figure 29

Study 3 Impulsivity by Probability of Trial Conviction Interaction on Subjective Trial Aversion

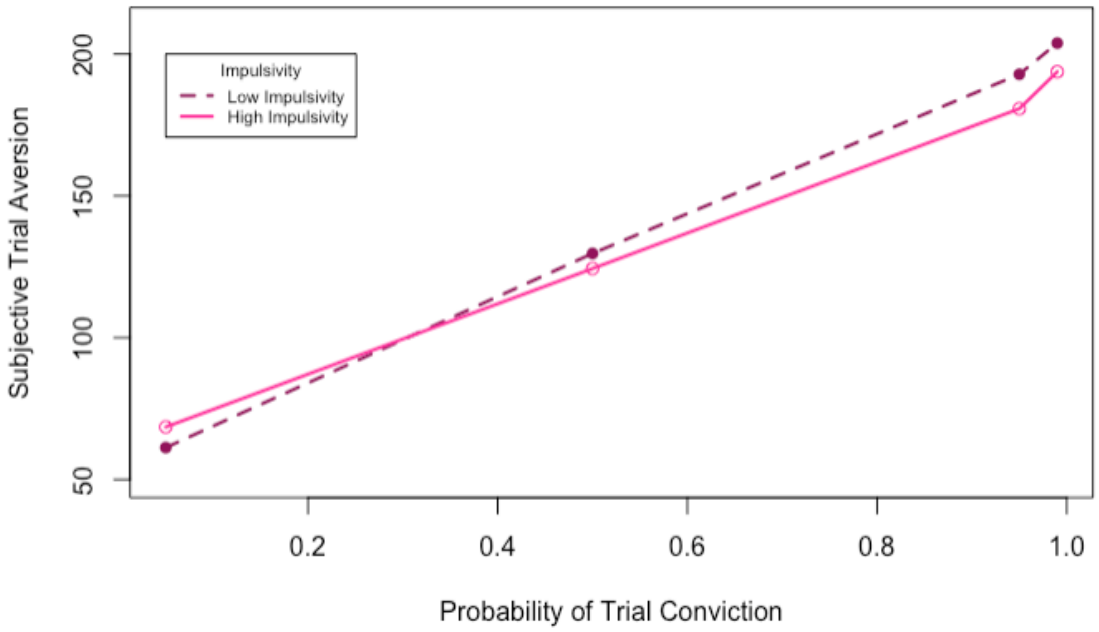


Figure 30

Study 3 Blameworthiness by Probability of Trial Conviction Interaction on Subjective Trial Aversion

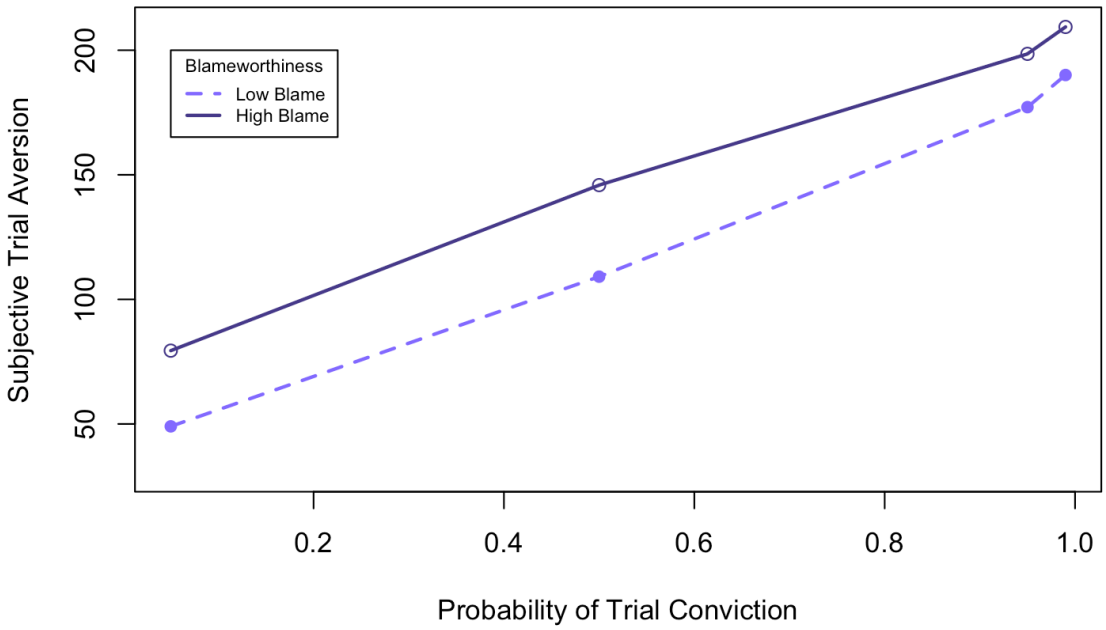
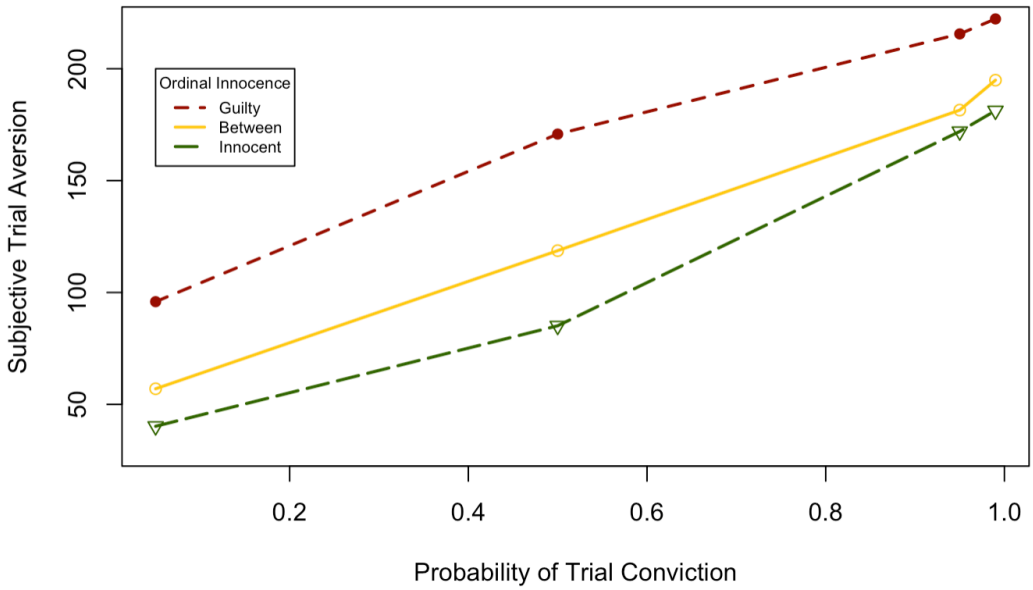


Figure 31

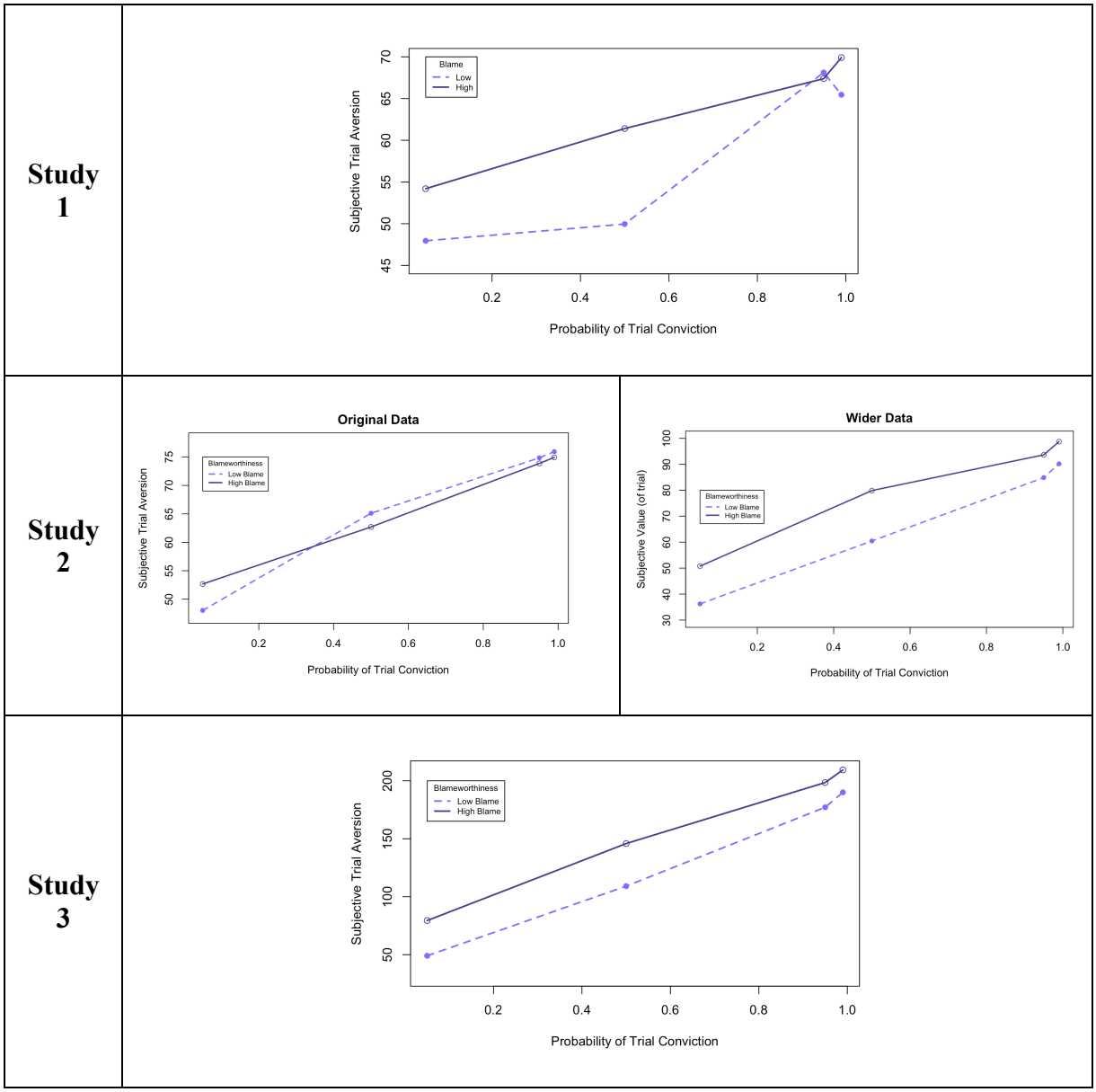
Study 3 Perceptions of Innocence by Probability of Trial Conviction Interaction



Note. Although the ordinal Innocence question was not measured in Study 3, this graph was made to look like Study 1 and 2's ordinal innocence interaction graphs. Using the composite continuous innocence/guilt measure, a score of 100 was classified as "Innocent" with 17 participants in that group. A score of -100 was classified as "Guilty" with 69 participants in that group, and a score between -99 and 99, inclusive, was considered "Between" with 239 participants in that group.

Figure 32

Three-Study Blameworthiness Interaction Comparison



Chapter 5: Study 4 – Attorney Advice and Plea-Bargain Decision-Making

The primary purpose of Study 4 was to increase the external validity of the plea-bargain decision context examined in the past three studies. First, because the crime in the hypothetical scenario is one of criminal negligence, it is likely that most criminal defendants charged with a similar crime would be let out on bail, rather than waiting in jail for trial. So, the Waiting-for-Trial Location manipulation was removed from this study and all participants were told they were out on bail. Second, the presence of criminal defense attorneys and the content of their advice to clients are central features of the plea-bargain decision-making context, so new manipulations were created to address this gap. Third, because attorneys are not a required part of the plea-bargain decision context, some participants were given the choice about whether they wanted attorney advice—enabling them to select a situational feature of their plea-bargain decision-making context that they may believe is in their best interest. The present study will also replicate this dissertation's past experimental findings of probability, delay, and factual innocence as well as the trait-level person effects and situated-person effects on plea-bargain decision making; however, this introduction will focus on the hypotheses related to the new manipulation of attorney advice.

The existing experimental literature on the effect of attorney advice on plea decisions is mixed. For example, Henderson and Shteynberg (2020) found that an attorney's recommendation to an ambiguously innocent participant to accept or reject a plea deal had a persuasive effect on participants' plea decisions, especially when the attorney was perceived as trustworthy. Henderson and Levett (2018) similarly found that attorney recommendation interacted with innocence/guilt such that innocent participants

were more vulnerable to the social influence of their attorney's recommendation than guilty participants. In contrast, Zimmerman and Hunter (2018) found no effect of attorney recommendation on participants' plea decisions, which is particularly striking given that all participants were innocent in the hypothetical crime scenario, so according to Henderson and Levett (2018), they should have been particularly vulnerable to the attorney's persuasion. Accordingly, the following was hypothesized:

H4a. *Attorney advice will have a persuasive effect on participants' plea-bargain decisions. Specifically, participants given plea advice will be more likely to accept plea bargains than will participants given trial advice.*

H4b. *Attorney advice will interact with participant innocence, such that advice that is consistent with the criminal justice system's most efficient outcome for defendants (i.e., guilty defendants accept the plea and innocent defendants go to trial) will produce that effect: innocent participants who are given trial advice will be the group that is most likely to choose to go to trial and guilty participants who are given plea advice will be the group that is most likely to accept the plea.*

Additionally, extrapolating from ***H4b*** and Henderson and Shteynberg (2020)'s finding that the persuasive effect of an attorney is especially strong when the attorney was perceived to be trustworthy, the following was hypothesized:

H4c. *Attorney advice, attorney trustworthiness, and factual innocence will interact such that the relation between attorney advice and attorney trustworthiness on plea-bargain decisions will be stronger for innocent participants than for guilty participants.*

Extending past research on the effect of attorney advice, the present study examines whether the key trait-level individual difference of impulsivity affects plea-bargain decision-making. Specifically, all three past studies in this dissertation found that participants with lower impulsivity were more affected by probability of trial conviction, with higher probabilities causing them to accept more pleas. Attorney encouragement of low-impulsivity participants to choose to go to trial may temper risk aversion. Thus, the following was hypothesized:

H4d. *Participant impulsivity, attorney advice, and probability of trial conviction will interact to predict plea-bargain decisions.*

In addition to the new manipulation of attorney advice, the traditional discounting manipulations of Probability and Delay will still be manipulated. Consistent with Study 2's finding that the interactive effect of Probability and Delay on plea-bargain decision was conditioned on Waiting-for-Trial Location—such that there was no interactive effect when participants were out on bail—the following was hypothesized:

H4e. A significant interaction between Probability of Trial Conviction and Delay until Trial should not appear because all participants were out on bail, but the direction of the probability effect should be consistent with those found by Clatch and Borgida (2021) and Studies 2 and 3 in Chapters 3 and 4 above.

Furthermore, the present study will expand on the procedural justice relations examined in Study 3. Equipped with the knowledge from Study 3 that innocent participants viewed their plea-bargaining process as less procedurally just and that greater acceptance of plea-bargain decisions predict stronger perceptions of procedural justice, the following hypotheses were specified:

H4f. *Innocent participants will view their plea-bargaining process as less procedurally just than guilty participants.*

H4g. *Factual innocence will interact with participants' plea-bargain decisions to predict their perceptions of procedural justice. Specifically, innocent participants who accepted pleas will have the lowest perceptions procedural justice.*

Then, because an attorney's advice can be persuasive, participants may view their attorney as being a part of a just, or unjust criminal justice system, attempting to encourage a particular plea-bargain decision. And when a person chooses to receive attorney advice, taking a degree of control in creating their plea-bargaining environment, rather than simply being given advice, it may influence perceptions of procedural justice. Thus, the following was hypothesized:

H4h and 4i. *Participants who are asked whether they want attorney advice (and say yes, then receiving it) will perceive more procedural justice in their plea-bargaining process than will participants who are simply given attorney advice. And this effect will not be dependent on what advice they actually receive (trial vs. plea advice).*

Because Study 3 showed a positive relation between more pleas and procedural justice perceptions, prediction H4b's predictors (Attorney Advice and Factual Innocence) are also expected to interact, but affecting a different outcome variable: procedural justice. Participants likely have a basic understanding about what the criminal justice system's "best" outcome is for their case depending on their innocence/guilt. And when that "best" outcome is vocalized by their attorney, as their guide to the system, participants will consider the system more procedurally fair. Specifically, the following was hypothesized:

H4j. *Innocent participants who are given trial advice and guilty participants who are given plea advice will be the groups with the highest perceptions of procedural justice.*

Method

Participants

Participants were recruited on Prolific and received $3.50 for their participation. Prolific is a source of online convenience samples and is an increasingly-used alternative to Amazon Mechanical Turk. The final sample (N = 479) was nationally representative based on gender, race and age,[76] except that Black Americans were oversampled to allow for better race sub-group comparisons. Similar to Study 3, this study strove to balance generalizability to the population of the United States (on the basis of gender and age) with collecting a large enough sample of Black Americans to make cross-race comparisons of plea-bargain decision-making. This latter purpose derives from a motivation to recognize that people of color, especially black men, have long been overrepresented in the U.S. criminal justice system (Spohn, 2011).

The final sample consisted of 49% (n = 234) women and 47% (n = 225) men and had a mean age of 41.98 (SD = 14.20). The dataset consists of 53% self-identifying White participants (n = 254), 31% (n = 147) Black participants, 7% (n = 32) Asian participants,

[76] Using the same percentages as Studies 2 and 3, which utilized the United States Census Bureau's estimates for age, gender, race, and ethnicity categories of the United States population up to the year 2019. Using those estimates the following quotas were entered into Qualtrics: 18-24 aged people (13%), 25-34 aged people (18%), 35-44 aged people (18%), 45-54 aged people (19%), 55-64 aged people (16%), over-65 aged people (17%); men (49%), women (51%); White-only (72%), Black/African American only (13%), Asian only (5%), Native American (1%), Other, including Native Hawaiian and people self-identifying with more than one race category (9%); and Hispanic (18%), Non-Hispanic (82%).

0.4% (*n* = 2) Native American, and 6% (*n* = 28) participants identifying as multi-racial or as an other racial identity. Thirty-two (7%) participants self-identified as Hispanic, with 430 (90%) identifying as Non-Hispanic.

One participant completed only middle school, 33 (7%) participants completed only high school, 109 (23%) completed only part of college, 178 (37%) completed only a college degree, and 143 (30%) completed a graduate degree.

There were 23 (5%) participants who identified as extremely conservative, 60 (13%) participants who identified as conservative, 37 (8%) who identified as slightly conservative, 106 (22%) who identified as moderate, 47 (10%) who identified as slightly liberal, 109 (23%) who identified as liberal, and 82 (17%) who identified as extremely liberal.

Design

This study employed a 2 (Advice Delivery) x 3 (Advice Content) x 2 (Factual Innocence) x 4 (Probability of Trial Conviction) x (Delay until Trial) mixed-factor design with three between-participants factors: Advice Delivery with two levels (Given vs. Asked), Advice Content with three levels (No Advice vs. Plea Advice vs. Trial Advice) and Factual Innocence with the same two levels, and same manipulation language as Study 3 (Innocent vs. Guilty, see SM 35 for the manipulation language). Despite being between-participants factors, Advice Delivery and Advice Content were not fully crossed.

Specifically, when participants were *not* asked whether they wanted attorney advice (i.e., randomly assigned to the Advice Delivery: Given condition), participants were randomly assigned to one of the three levels of Advice Content—plea advice, trial

advice, no advice. In contrast, when participants were asked whether they wanted attorney advice, they were only assigned to Advice Content's conditions that were responsive to their choice. For example, if participants did not want attorney advice, then they did not receive it. See the table immediately below for a tabular representation of these two factors' manipulations, which identifies which combinations of the two variables' levels were not used.

Study 4 Attorney Advice Delivery by Advice Content Methodology Table[77]

Advice Content	**Advice Delivery** [Given vs. Asked randomly assigned]			
	Not Asked Permission (i.e., simply "Given")	Asked & Answered Yes	Asked & Answered No	*Randomization*
Trial			N/A	*2 groups not randomly determined*
Plea			N/A	*2 groups not randomly determined*
No Advice		N/A		*2 groups not randomly determined*
Randomization	*3 groups randomly assigned*	*2 groups randomly assigned after "Yes" response*	*only 1 group*	

Waiting-for-Trial Location was held constant with participants being told that they would be waiting for trial while out on bail (see SM 38 the manipulations' wording). Thus, participants were randomly assigned to one of the following four conditions: Innocent-and-Given-Advice, Innocent-and-Asked-Advice, Guilty-and-Given-Advice, and Guilty-and-Asked-Advice.

The two within-participants factors are Probability of Trial Conviction with four levels (20%, 75%, 95%, 99%) and Delay until Trial with three levels (1 day, 1 month, 1 year).[78] Each participant received all three levels of Delay until Trial, and all levels were

[77] *Note.* Although there are various cells/groups that cannot be compared in the same way as typical "full-crossed" participants can be, some comparisons can still be made. Additionally, I will calculate how many participants ended up in each cell/group. It's possible, for example, that all participants assigned to the "Asked" condition, respond that they do want attorney advice. In that case, the worry about randomization violations are moot.

[78] This was reduced to three levels to reduce survey length, but the lowest and highest delays used in this dissertation's previous studies were retained to be able to compare it to past studies.

presented in random order to reduce the chance of order effects. Each participant received all four levels of Probability of Trial Conviction, and the blocks were shown in ascending order within each Delay block.

The first outcome variable in this study was *Subjective Trial Aversion*, and this operationalization of Subjective Trial Aversion is exactly the same as in Study 3. The second outcome variable in this study is *Procedural Justice*, and this variable will be measured very similarly as in Study 3, by using all the items in Study 3 and an additional item (for participants who received attorney advice) asking about how much their attorney's advice addressed their concerns (SM 36 for the exact wording of the items).

There is currently no feasible way to calculate standard effect sizes for individual model terms such as main effects and interactions in mixed effects models because of the way variance is partitioned in mixed models (Rights & Sterba, 2019). As a best approximation, G*Power was used based on a repeated measures ANOVA with 1 between-participants variable and 1 within-participants variable interacted. Given an effect size *f* of .1 (taken from Clatch & Borgida, Study 3, 2021, highest order interaction model term, i.e., Delay*Probability*Waiting-for-Trial Location), an alpha of .05, power of .8, number of between-participants conditions equal to 6,[79] number of within-participants measurements equal to 4 (i.e., Probability with largest number of levels of the two within-participants variables), a correlation among the repeated measures of .03 (calculated based on Clatch & Borgida, Study 3, 2021, correlation of Subjective Trial Aversion scores based on Delay's level), and nonsphericity correction equal to 1, the total

[79] 2 Factual Innocence * 3 Attorney Advice Content (i.e., all 6 cells) was used in the power analysis even though these two variables were not fully crossed in the experiment.

sample size required is 462 (see SM 46 for G*Power screenshot). In order to allow for a degree of missing data, 480 participants' data was collected.[80]

Materials, Measures and Procedure

The study materials consisted of an online survey nearly identical to Study 3's survey. One key difference was the addition of an attorney advice manipulation. The Trial Advice read as follows:

> "Based on the police report and what I know about the evidence in this case, I think we should bring the case to trial. The Fed Ex driver was far away from you, and although the prosecutors might introduce evidence of the times texts were sent and received from your phone, the Fed Ex driver's testimony won't be able to isolate the exact time he allegedly saw your head down. Also, the prosecutor won't be able to prove beyond a reasonable doubt that you touched the phone at the time of the accident. The biggest hurdle, though, is that when a child is the victim, the jury is protective of the child, and usually wants to see someone convicted. Take a moment and think about your preference. Remember that there are pros and cons about each choice, and the choice is yours. Overall, though, it's my recommendation that we go to trial."

The Plea Advice read as follows:

> "Based on the police report and what I know about the evidence in this case, I think the plea is your best option. The prosecutors are going to have the Fed Ex driver as their key witness and be able to triangulate within a few minutes when he allegedly saw you with your head down driving through the neighborhood. Also, when a child is the victim, the jury is protective of the child, and usually wants to see someone convicted. The one thing that would help us at trial, is that because of the way texting is recorded, the prosecutor might not be able to prove beyond a reasonable doubt that you touched the phone at the time of the accident. Take a moment and think about your preference. Remember that there are pros and cons about each choice, and the choice is yours. Overall, though, it's my recommendation that you accept the plea bargain offered."

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[80] To this point I had only used Prolific to collect data in one study (Study 3 of this dissertation), and although I had less than 1% missingness in my dependent variable, I had more than 1% missingness using the strictest listwise rule. In this study I allowed for 3-4% missingness, rounding from 462 to 480.

Additionally, for participants in Advice Delivery's Asked condition, before attorney advice was given, they were asked whether they would like an attorney's advice. The last differences are that participants were asked a series of questions about their attorney advice and a series of questions about their perceptions of the criminal justice system, relating particularly to plea-bargain and trials. More details on these last two additions are presented below.

Study 4's survey contained the same attention checks and data quality checks as this dissertation's past studies (SM 2). Study 4's vignette/scenario (SM 35), legal decision-making questions (SM 5), and trait-level individual-difference measures exactly matched Study 3's materials. After reading the scenario, many participants were given attorney advice, and then were asked to make a series of binary, forced-choice plea bargain questions. Then, participants were asked the situated-person variable questions: Blameworthiness and Innocence, Attorney Trustworthiness, and Procedural Justice questions (presented in random order to reduce order effects). Next, the Impulsivity scale was presented to participants, and last, participants answered the driving, personal involvement, criminal and legal experience, and demographic questions.

Attorney Advice Content and Advice Delivery

As Snyder and Ickes (1985) describe, most experimental social psychology studies do not allow participants to shape their environment (or elect into a particular situation). Attempting to address this in Study 4, participants assigned to the Asked (but not Given) level of Advice Delivery will be enabled to choose whether they would like an attorney's advice. Those that chose to be provided an attorney's advice were randomly assigned to receive either Trial Advice or Plea Advice. Those that choose not to be

provided attorney's advice proceeded directly to the legal decisions, as in this dissertation's previous studies. Using a sample of 112 Lucid participants, this new manipulation was pilot tested to ensure that the two advice scripts (trial and plea) did not differ in participants' ratings of attorney trust (B = -.20, SE = .21, p > .1), attorney competence (B = -.37, SE = .20, p = .06), and attorney persuasiveness (B = -.21, SE = .24, p > .1). Because there was a marginal difference in participants' ratings of attorney competence such that participants rated the Trial Advice as marginally less competent advice, these three measures were also included in Study 4.

Two hundred and forty participants were assigned to the Not Asked condition of Advice Delivery, and 241 were assigned to the Asked condition. Within the Not Asked condition, 83 participants received no advice, and within the Asked condition, only 13 participants answered that they did not want attorney advice. Because of this small latter cell size, no tests of either advice-related variable used these 13 participants.

Procedural Justice. SM 36 shows the Study 3 Procedural Justice questions plus an additional question asked participants who received attorney advice how much that advice addressed their concerns. This study's reliability for the five-item Procedural Justice measure (identical to Study 3's) was .87, and this study's reliability for the six-item Procedural Justice measure including the question about attorney advice addressing a participant's concerns was .88.

Attorney Trustworthiness. Participants were asked to what extent they trusted their attorney's advice, how competent they thought their attorney was, and how persuasive they thought their attorney was (all measures used in the Attorney Advice Pilot). Advice Content did not influence participants' ratings of attorney trust (B = -.05,

SE = .09, $p > .1$) or attorney credibility (*B* = -.08, *SE* = .08, $p > .1$). However, unlike the pilot study, Trial advice was associated with significantly lower persuasiveness (*B* = -.26, *SE* = .11, $p < .05$). A follow-up analysis revealed that higher ratings of attorney persuasiveness was related participants accepting more plea bargains (*B* = 6.09, *SE* = 2.98, $p < .05$).

Criminal Justice System Beliefs. In an attempt to follow-up on the race differences in plea-bargain decisions in Study 3, a series of questions was written to assess participants' general feelings (positive, negative, trust, and skepticism) about the criminal justice system, their perceptions of the plea-bargaining system, and their perceptions of criminal trials (see SM 47 for wording of the items). After recording the negative and skepticism feelings as well as the negatively worded plea and trial questions, these 14 items had a reliability of $\alpha = .77$, so they were averaged to create a single score.

Legal Cynicism. Legal cynicism is a cultural frame in which people perceive the law to be illegitimate, unresponsive, and ill equipped to ensure public safety.

In an attempt to follow-up on the race differences in plea-bargain decisions in Study 3, seven items were compiled from the Urban Institute (2019, p. 11; reverse-coded) and two items about police effectiveness were compiled from Kirk and Papachristos (2011) to capture legal cynicism (see SM 48 for the items' wording). These nine items had a reliability of $\alpha = .80$.

Subjective Trial Aversion Hypotheses

Hypothesis 4a. *Attorney advice will have a persuasive effect on participants' Subjective Trial Aversion scores. Specifically, participants given plea advice will have higher Subjective Trial Aversion scores than will participants given trial advice.*

Hypothesis 4bi. *Factual Innocence will predict Subjective Trial Aversion scores such that participants who are guilty will have higher Subjective Trial Aversion scores than will innocent participants.*

Hypothesis 4bii. *Attorney Advice will interact with Factual Innocence, such that Innocent participants who are given Trial Advice will be the group that is most likely to choose to go to trial and Guilty participants who are given Plea Advice will be the group that is most likely to accept the plea.*

Hypothesis 4c. *Attorney Advice, Attorney Trustworthiness, and Factual Innocence will interact such that the relation between Attorney Advice and Attorney Trustworthiness on Subjective Trial Aversion scores will be stronger for Innocent participants than for Guilty participants.*

Hypothesis 4d. *Participant Impulsivity, Attorney Advice, and Probability of Trial Conviction will interact to predict Subjective Trial Aversion scores.*

Hypothesis 4e. *The two-way interaction between Probability of Trial Conviction and Delay until Trial on Subjective Trial Aversion scores will be nonsignificant.*

Hypothesis 4f. *As shown in Study 3, Probability of Trial Conviction and Factual Innocence will interactively predict Subjective Trial Aversion scores such that there should be a flattened (potentially non-significant) effect of Probability of Conviction on guilty participants' Subjective Trial Aversion scores relative to innocent participants.*

Hypothesis 4g. *Highly impulsive participants will not prefer the uncertain/risky option, trial, evincing lower Subject Trial Aversion scores, relative to less impulsive participants; that is, Impulsivity should not predict Subjective Trial Aversion scores.*

Hypothesis 4h. *Participants' impulsivity will interact with Probability of Trial Conviction, such that low-impulsivity participants will be especially sensitive to probability, evincing a stronger positive relation between Probability of Trial Conviction and Subjective Trial Aversion scores than highly impulsive participants.*

Hypothesis 4i. *Participants' impulsivity will not interact with Delay until Trial, to predict Subjective Trial Aversion scores.*

Hypothesis 4j. *Participants experiencing more self-blame for the accident and child's injury will have higher Subjective Trial Aversion scores than will participants experiencing less self-blame.*

Hypothesis 4k. *Participants who perceive themselves to be less innocent of the crime charged will have higher Subjective Trial Aversion scores than will participants who perceive themselves to be more innocent.*

Hypothesis 4l and 4m. *Consistent with the past three studies' findings, participants' self-blame will interact with Probability of Trial Conviction to predict Subjective Trial Aversion scores. Also, consistent with Study 3's findings, the interaction between participants' Perceptions of Innocence and Probability of Trial Conviction will depend on the measurement of Perceptions of Innocence. Specifically, the ordinal measure and the continuous measure of innocence are predicted to be nonsignificant, but the continuous measure of guilt and the composite continuous measure are predicted to interact with Probability.*

Procedural Justice Hypotheses

Hypothesis 4n. *Innocent participants will view their plea-bargaining process as less procedurally just than will guilty participants.*

Hypothesis 4o. *Factual innocence will interact with participants' Subjective Trial Aversion scores to predict their perceptions of procedural justice. Specifically, innocent participants who have higher Subjective Trial Aversion scores will have the lowest perceptions of procedural justice.*

Hypotheses 4p and 4q. *Participants who are asked whether they want attorney advice (and say yes, then receiving it) will perceive more procedural justice in their plea-bargaining process than will participants who are simply given attorney advice. And this effect will not be dependent on what advice they actually receive (trial vs. plea advice).*

Hypothesis 4r. *Innocent participants who are given trial advice and guilty participants who are given plea advice will be the groups with the highest perceptions of procedural justice.*

Results

The present study's analyses consisted of two sets of preliminary analyses: demographics predicting Subjective Trial Aversion scores and race-based differences on a variety of outcome measures including Subjective Trial Aversion, Procedural Justice, and criminal justice system beliefs. Then, Study 4's analyses involved testing hypotheses for two key outcome variables: Subjective Trial Aversion and Procedural Justice. All analyses that involve Subjective Trial Aversion as the outcome variable used mixed-effects regressions because the variable was measured 12 times across levels of probability and delay. All analyses that do not involve Subjective Trial Aversion,

Probability of Trial Aversion, or Delay until Trial, used fixed-effects linear regression because nothing varied within participants.[81]

Preliminary Analyses

Demographic Analyses

Table 27 shows the linear regressions of gender, race, age, education, age*race, gender*race, and political ideology predicting Subjective Trial Aversion scores.[82] There were no race differences on Subjective Trial Aversion scores, including when Race was interacted with gender or age (see Table 27). Age also did not predict Subjective Trial Aversion scores. A continuous measure of Education significantly predicted Subjective Trial Aversion scores such that as education increased, Subjective Trial Aversion scores decreased (B = -7.53, SE = 3.18, $p < .05$), and Table 27 shows the follow-up regressions using a categorical measure of Education, each with a different reference category in brackets for clarity. Participants who went to graduate school had significantly lower Subjective Trial Aversion scores than college graduates (B = 17.84, SE = 7.05, $p < .05$), high school graduates (B = 24.08, SE = 12.13, $p < .05$), and marginally lower Subjective Trial Aversion scores than did participants who completed part of college (B = 15.53, SE = 7.99, $p = .05$). Political affiliation also predicted Subjective Trial Aversion scores: as participants' conservatism increased, their Subjective Trial Aversion scores decreased (B = -3.58, SE = 1.61, $p < .05$).

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[81] When Subjective Trial Aversion was used in a regression but the experimental factors of delay and probability were not, then participants' average Subjective Trial Aversion was used, consolidating each participant's 12 Subjective Trial Aversion measures.

[82] Non-binary-gender-identifying individuals had significantly higher Subjective Trial Aversion scores than Men (B = -62.08, SE = 28.40, $p < .05$), and marginally higher Subjective Trial Aversion scores than Women (B = -53.61, SE = 28.39, $p = .06$), but non-binary-gender group only contained five participants.

Race Follow-Ups

Although the present study's Demographic Analyses section indicated that there were no race differences in participants' patterns of plea-bargain decision-making, follow-up analyses were conducted because Study 3 found significant differences and Study 4 measured new variables designed to detect race-based differences.

First, participants' responses about what factors were important to their plea-bargain decisions were analyzed. Next, a series of regressions testing the interaction between Race and the experimental factors was run. Last, race differences in Legal Cynicism and Criminal Justice System Beliefs were assessed.

First, SM 49 shows the Decision-Making Reasons' correlations with each other, and the reliability of four factors' importance ratings (used in Study 3: probability, delay, criminal charge and sentence, and waiting-for-trial location) was $\alpha = .68$, and the reliability of five factors' importance ratings (the first four with the additional attorney item) was $\alpha = .73$. Whites rated this constellation of situational features (probability, delay, criminal charge and sentence, waiting-for-trial location, and attorney advice) as marginally less important to their plea-bargain decisions than Blacks ($B = -.322$, $SE = .13$, $p = .08$). Additionally, consistent with Study 3, Whites rated the importance of their factual innocence as less important to their plea-bargain decisions than Blacks ($B = -.40$, $SE = .19$, $p < .05$).

Because the direction of the effect was the same as Study 3's significant findings,[83] a series of multiple regressions was performed to determine whether the

[83] Additionally, participants ratings of the importance of this constellation of situational features was marginally related to Subjective Trial Aversion: higher importance ratings predicted lower Subjective Trial Aversions ($B = -4.51$, $SE = 2.41$, $p = .06$).

experimental factors did in fact influence plea-bargain decisions differentially for Blacks and Whites. Participant Race interacted with Probability of Trial Conviction to predict Subjective Trial Aversion scores (B = .15, SE = .05, p < .01), and Figure 33's right panel shows that white participants' Subjective Trial Aversion scores were more influenced by Probability of Trial Conviction than black participants' scores: the gray line starts off lower than the black line and ends higher than the black line. And this two-way interaction is qualified by a three-way interaction among participant Race, Probability of Trial Conviction, and Factual Innocence (B = .24, SE = .11, p < .05). Figure 34's bottom panel shows that the White participants' (left) graph has lines that converge as Probability increases and the Black participants' (right) graph has lines that diverge as Probability increases. No other two-way or three-way interactions with Race predicted Subjective Trial Aversion scores.[84]

Furthermore, participant Race did not predict Legal Cynicism (see Table 28). Race also did not predict composite Criminal Justice System Beliefs scores (see Table 28). However, when the 14 Criminal Justice System Beliefs items were divided into Criminal Justice Feelings (α = .87), Criminal Justice Trial Beliefs (α =.82),[85] and Criminal Justice Plea Negative Beliefs (α = .86),[86] participant Race predicted Criminal Justice Trial Beliefs. Specifically, white participants had more positive views about trial

[84] The only other significant three-way interaction found in Study 3 was Race*PTC*WTL, and because Waiting-for-Trial Location was not manipulated in Study 4 this could not be tested.
[85] The three-item measure had this reliability. The four-item measure, including the question about trial allowing guilty people to "game" the system to avoid harsher penalties, had a reliability of α = .53, so the three-item measure was used.
[86] The negative items were items 1, 2, and 4 (see SM 50), and the positive items were items 3, 5, and 6, but the positive items only had a reliability of α = .62.

on average—that trial allows people to share their point of view, defend their Constitutional rights, and defend their innocence—relative to black participants (B = 3.56, SE = 1.77, $p < .05$). But, as noted above, because there was no main effect of race on Subjective Trial Aversion scores follow-up analyses were conducted to determine whether Criminal Justice Trial Beliefs predicted Subjective Trial Aversion scores. The interaction between Participant Race and Criminal Justice Trial Beliefs was only marginally significant (B = .66, SE = .38, $p < .09$) such that black participants with more positive views about trial counterintuitively had higher Subjective Trial Aversion scores.

Subjective Trial Aversion Hypothesis Testing

This section is divided into hypothesis tests using experimental predictors like Probability of Trial Conviction, tests using trait-level predictors like impulsivity, and situated-person predictors like blameworthiness.

Experimental Predictors

Attorney Advice and Factual Innocence.

Testing ***H4a***'s prediction that the attorney's Advice Content would influence participant's plea decisions returned a null result (see Table 29). ***H4bi***'s prediction (confirmed in Study 3) that guilty participants would have higher Subjective Trial Aversion scores than innocent participants was confirmed (B = -25.06, SE = 5.66, $p <$ .001). These two experimental predictors also interacted to predict Subjective Trial Aversion scores (see Table 29).[87] In particular, as shown by Figure 35, Innocent

[87] This regression was conducted using the Advice Delivery: Not Asked subset of data because participants were randomly assigned to this condition and then randomly assigned to attorney Advice Content (None vs. Plea vs. Trial), whereas in the Advice Delivery: Asked subset, true randomization was violated because participants were given the choice whether they wanted advice or not.

participants were less influenced by attorney Advice, as evinced by the nearly flat green line, relative to Guilty participants' heavily sloped pink line. And regarding the specific group comparison, the only significant group differences involved Guilty participants in the Plea Advice condition. Specifically, this group had significantly higher Subjective Trial Aversion scores than Innocent participants who were given trial advice ($t(71) = -3.72$, $p < .001$), significantly higher Subjective Trial Aversion scores than Innocent participants given trial advice ($t(62) = -3.79$, $p < .001$), and significantly higher Subjective Trial Aversion scores than Guilty participants given trial advice ($t(75) = 2.43$, $p < .05$).

Next, testing the predicted tree-way interaction between Advice Content, Attorney Trustworthiness, and Factual Innocence (***H4c***) produced a nonsignificant result (see Table 29). Last, testing the predicted three-way interaction among Advice Content, Participant Impulsivity, and Probability of Trial Conviction (***H4d***) produced a nonsignificant result (see Table 29).[88]

Probability and Delay. As anticipated (in ***H4e***), there was a nonsignificant two-way interaction between Probability of Trial Conviction and Delay until Trial (see Table 30) and as Probability of Trial Conviction increased, so did Subjective Trial Aversion scores ($B = 1.41$, $SE = .03$, $p < .001$). Consistent with ***H4f***, there was a nonsignificant two-way interaction between Probability of Trial Conviction and Factual Innocence (see Table 30) such that Innocent participants had a stronger effect of Probability of Trial Conviction on Subjective Trial Aversion scores than Guilty participants ($B = .11$, $SE = .05$, $p < .05$).

[88] Both of these regressions also used only the Not Asked subset of data.

Trait-Level Predictors

Impulsivity. Consistent with ***H4g***, Impulsivity does not predict Subjective Trial Aversion scores as a main effect (see Table 30). Consistent with ***H4h***, Impulsivity interacts with Probability of Trial Aversion to predict Subjective Trial Aversion scores (B = -.02, SE = .001, $p < .001$). Figure 36 shows this effect as the below-median-impulsivity group has a steeper line than the above-median-impulsivity group. Last, consistent with ***H4i***, Delay until Trial does not interact with Impulsivity to predict Subjective Trial Aversion scores (B = -.02, SE = .001, $p < .001$).

Situated-Person Predictors

Blameworthiness and Innocence. Consistent with ***H4j***, participants experiencing more self-blame for the accident and child's injury had higher Subjective Trial Aversion scores compared to participants experiencing less self-blame (B = .36, SE = .04, $p <$ .001). Blameworthiness and Probability of Trial Conviction had a marginally significant relation (B = -.001, SE = .0003, p = .06). Figure 37 shows the below-median and above-median groups, with the below-median group's line getting closer to the above-median group's line at the high Probabilities of Trial Conviction, reflecting increasing sensitivity to Probability of Trial Conviction.

Consistent with ***H4k***, all measures (Ordinal Innocence, Continuous Innocence, Continuous Guilt, and Composite Innocence-Guilt) predicted Subjective Trial Aversion scores in the expected directions (see Table 30). Consistent with ***H4l***, Continuous Guilt interacted with Probability of Trial Conviction to predict Subjective Trial Aversion scores (B = -.003, SE = .0007, $p < .001$), demonstrating that as participants' perceptions of guilt increased, the influence of Probability of Trial Conviction on plea-bargain

decisions decreased. Also as expected, Continuous Innocence did not interact with Probability of Trial Conviction to predict Subjective Trial Aversion scores (see Table 30). Two unexpected marginal effects remain: Ordinal Innocence* PTC (B = -.05, SE = .03, p = .09) and Composite Continuous Perceptions (B = .001, SE = .0003, p = .06).

Procedural Justice Hypothesis Testing

Consistent with ***H4n***, Innocent participants perceived there to be less procedural justice in their plea-bargain decision-making process (B = -2.82, SE = .99, p < .01). As seen in Table 31, the data did not support ***H4o***, predicting an interaction between Subjective Trial Aversion and Factual Innocence (B = -.02, SE = .02, p > .1). Consistent with ***H4p***, participants who were Not Asked whether they wanted attorney advice reported less procedural justice in their plea-bargain decision-making process (B = -6.68, SE = .95, p < .001), and as predicted (***H4q***), this main effect was not qualified by a Delivery*Content interaction (see Table 31)The data only provided marginally significant evidence of an interaction between Factual Innocence and attorney Advice Content on Procedural Justice (B = 3.85, SE = 2.12, p = .07), and post-hoc t-tests showed that Guilty participants given Plea Advice perceived there to be significantly more procedural justice in their plea-bargain decision-making process than Innocent participants given that same advice (t(74) = 2.91, p < .01), but no other mean differences were significant (see SM 50).

Discussion

Overall, Study 4 provided the opportunity to make the plea-bargaining situation, which was tested across this dissertation's studies, more realistic, and externally valid. This was done by introducing attorney advice into the plea-bargaining scenario. This

study also tested many of the same relations that were previously tested in this dissertation to determine their reliability. This discussion section will describe the impact of the following predictor categories' impact on Subjective Trial Aversion scores: (1) situation variables including the experimental factors of attorney advice and factual innocence, (2) person variables, including demographic and trait-level individual differences, and (3) situated-person variables, including Blameworthiness and Perceptions of Innocence. This discussion with finish by summarizing the findings of the Procedural Justice hypotheses.

Situation Variables

Probability, Delay, and Factual Innocence

Consistent with Clatch and Borgida's (2021) findings, and Studies 2 and 3 of this dissertation, the present study's findings indicate that increases in Probability of Trial Conviction result in more accepted plea bargains and that waiting for trial while out on bail nullifies the effect of delay until trial on plea-bargain decisions. Replication of these findings across various samples increases confidence in their reliability. Additionally, consistent with Study 3 of this dissertation, and past research (see, e.g., Tor et al., 2010), Innocent participants reject more pleas than Guilty participants, but these two groups of participants are far from categorically distinct in terms of their plea-bargain decisions. Figure 38 shows Study 3 and Study 4's distributions of Subjective Trial Aversion scores based on Factual Innocence with largely overlapping frequency bars.

Similar to Study 3, nearly a third of Innocent participants (30.7%, 73 of 1238 participants in the innocent condition) accepted the plea every time it was offered despite the fact that the associated criminal sentence increased to be nearly as harsh (i.e., just a 3-

day difference) as the trial's criminal sentence. And this rate only increased by 7% in Guilty participants: 37.3% accepted the plea every time it was offered. On the other end, 8.7% of Guilty participants exercised their trial right every time a plea bargain was offered, and this rate only increased by 10% in Innocent participants: 18.1% chose the trial option every time it was offered. And these different rates of all-trial and all-plea plea-bargaining strategies between innocent and guilty participants is what, likely, accounts for the present study's confirmation of the "guilty hypothesis" as tested by mean differences—that guilty participants, on average, accept more plea-bargains than innocent participants.

Moreover, this main-effect difference between innocent and guilty participants is qualified by an interaction with Probability of Trial Conviction. In particular, innocent participants were more sensitive to the increase in probability of trial conviction—they accepted incrementally more pleas than guilty participants as that probability increased (see Figure 39's converging lines).

Attorney Advice

Although the attorney advice offered to participants did not seem to influence their plea-bargain decisions (see the lack of main effect in Table 29), this null finding was qualified by an interaction with Factual Innocence. Figure 35 shows that innocent participants were less malleable, with Trial and Plea advice producing only a 10-day difference in their group means, whereas guilty participants were very responsive to attorney advice with a 30-day difference in their group means.[89]

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[89] In fact, Innocent participants in the two Advice Content conditions did not differ in their Subjective Trial Aversion ($t(73) = -.54$, $p > .1$), but Guilty participants in the two Advice conditions did differ in their Subjective Trial Aversion ($t(75) = 2.43$, $p < .05$).

Furthermore, although this predicted interaction was tested and confirmed using Advice Delivery's Given condition's subset of data, follow-up analyses tested the same interaction using Advice Delivery's Asked condition's subset of data. Interestingly, when participants opted into receiving attorney advice, the interaction between Factual Innocence and Advice Content became nonsignificant (B = -25.55, SE = 16.67, $p > .1$; relative to Table 29's regression results). This suggests that there are different psychological processes at hand when attorney advice is simply a given, or default, versus when it is chosen. In particular, one possibility is that when attorney advice is a given, people are less likely to think about whether they agree with the advice—thus the greater malleability in the Given condition—than when they opt in for it. In other words, when people opt in for attorney advice they may be more deliberative and thoughtful about how the advice fits their interpretation of their situation, rather than more blindly accepting the attorney's argument that plea/trial is the better option.

Moreover, although the predicted interaction between Impulsivity, Advice Content, and Probability of Trial Conviction was nonsignificant using Advice Delivery's Given condition's subset of data, follow-up analyses using Advice Delivery's Asked condition's subset of data revealed a different result. Specifically, the predicted three-way interaction was significant (see Table 34). Figure 40 shows the Given advice condition (bottom panel) compared to the Asked advice delivery condition (top panel) and shows that when participants opted in for advice and received Plea advice, their person-level of impulsivity influenced how much risk aversion they displayed. Specifically, the low- and high-impulsivity groups' lines in the upper-left panel diverged from each other, in a pattern similar to all three past studies' Probability-by-Impulsivity interaction findings.

So getting plea advice after opting in for attorney advice was the only condition in which participants' impulsivity interacted with Probability. This suggests that studying plea-bargain decision-making with attorney advice as part of the decision-making context is important because otherwise researchers may overestimate the importance of trait-level person variables like impulsivity. Impulsivity matters, but only under certain conditions.

The two differences between the Given and Asked conditions of the Advice Delivery variable, suggest than once participants opt in for attorney advice they may be more deliberative about whether they agree with that advice and they may be more likely to evaluate their decisions more on the basis of their own trait-level proclivities compared to when participants simply receive attorney advice as a routine measure.

Last, although the predicted interaction between Advice Content, Attorney Trustworthiness, and Factual Innocence was nonsignificant, follow-up analyses revealed that Advice Content and Attorney Trustworthiness interacted (once Factual Innocence was removed from the model) to predict plea-bargain decisions ($B = -19.66$, $SE = 3.58$, $p < .001$). Specifically, as trust in one's attorney increased, the attorney's advice was more influential on one's plea-bargain decisions (to go to trial or accept the plea).

Person Variables

Demographic Variables

Participants' gender and education have had inconsistent effects on plea-bargain decisions, but a pattern seems to be developing. In particular, the gender effects seem to be small such that they are either nonsignificant or occasionally suggest that one group (most often the small non-binary group) made significantly different plea-bargain decisions than the other groups. Education, in contrast, although also inconsistent, paints

a slightly clearer picture: when education significantly predicts plea-bargain decisions, as education increases, participants are more likely to choose to go to trial rather than accept the plea bargain.

Participants' age has not predicted plea-bargain decisions, but other research looking at adolescents (under 18; Green et al., 1999; Helm et al., 2018) has shown differences in plea-bargain decision-making. Additionally, the present study was the first to suggest that political ideology may predict differences in plea-bargain decisions, and future work should explore whether this finding is reliable, and what explains why conservatives are more resistant to accepting plea offers.

Studies 3 and 4 of this dissertation research conducted a variety of follow-up analyses to examine whether there are race differences in plea-bargain decision-making, and if so, to assess the nature of race's influence in this context. The two findings that were consistent across Studies 3 and 4 were that Race affected the impact of Probability of Trial Conviction on plea-bargain decisions and Race affected the multiplicative impact of Probability of Trial conviction and Factual Innocence on plea-bargain decisions. Figure 34 gives insight into the latter finding, and highlights that the addition of attorney advice into the study materials of Study 4 may have particularly impacted Innocent-White participants. Specifically, Innocent-White participants' sensitivity to their likelihood of conviction at trial seen in Study 3 was drastically reduced with the introduction of attorney advice, however, it was not reduced enough to make the interaction null. This indicates that Innocent-White participants, relative to Guilty-White participants and all Black participants, overemphasized the importance of the likelihood of their conviction at trial, but attorney advice tempers that relative overemphasis.

Another notable observation regarding the three-way interactions seen in Study 3 and the present study is that the Black participants' graphs have lines (Innocent vs. Guilty) that are closer to each other, relative to the White participants' graphs. This suggests that Black participants may have less faith that their factual innocence or guilt matters—or put a different way, Black participants did not think that their factual innocence or guilt should influence their plea decisions as much as White participants did. Kassin (2008) suggests that the phenomenology of innocence typically reflects a strong, nearly unshakeable belief that one's innocence matters and will eventually come to light to save them. So the present study suggests that the phenomenology of innocence in plea-bargain decision-making may be qualified by demographic differences. This finding may be partially explained by the fact that White participants felt more positively about trial relative to how Black participants felt about trial,[90] which may have empowered White innocent participants in particular to choose to go to trial more and prevented Black innocent participants from the doing the same.

Trait-Level Individual-Difference Variable: Impulsivity

Study 4 affirms the conclusions of the previous chapter. Specifically Study 1's findings that Impulsivity directly influences plea-bargain decisions and interactively influences plea-bargain decisions with Delay until Trial appear to be anomalous—this dissertation's three most recent studies found nonsignificant effects. But across all four studies for lower-impulsivity participants, probability of losing at trial is a stronger motivator for accepting pleas relative to higher-impulsivity participants, who still are influenced by probability of losing at trial—just to a lesser degree.

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[90] See Table 28 for the regression results discussed earlier in Study 4's Results section.

Situated-Person Variables

Blameworthiness

Study 4 affirms the past three studies' finding that more self-blame predicts accepting more (and harsher) pleas. Study 4's marginal effect of Blameworthiness* Probability of Trial Conviction on Subject Trial Aversion highlights that although the past three studies have found a significant effect, this effect is small.

Perceptions of Innocence

Study 4 replicated the findings from Studies 1–3 that participants who perceive themselves to be more guilty accept more (and harsher) pleas. As was mentioned in Study 3's discussion, to determine the consistency of the findings of the interaction between Perceptions of Innocence and Probability of Trial Conviction, it is important to take into account how Perceptions of Innocence are measured and how Subjective Trial Aversion is measured. Study 3 and 4 have the most similarities on these methodological factors, and Study 4 affirms Study 3's finding that when participants felt more guilt about the accident and injury, probability of trial conviction mattered less in participants' plea bargain-decisions.

Limitations and Future Studies

Study 4 showed that various situational factors including likelihood of trial conviction and factual innocence as well as person variables including impulsivity and race matter in plea-bargain decision-making. Although the goal of this research study was to create a more externally valid plea-bargain decision-situation, the plea-bargaining situation that participants confronted still differs in many ways from real plea-bargaining.

First, defense attorneys most often meet (however briefly) with their clients to talk about the prospect of a plea bargain because of the consequentiality of the decision. Communicating in person, as opposed to via a paragraph of text, introduces nonverbal cues that can increase or decrease clients' confidence, trust, and skepticism in their attorney.

Second, allowing participants to choose to receive attorney advice may be more realistic than an experimental paradigm that simply introduces attorney advice as a paragraph in the study environment, but in most cases, at early hearings, the judge will suggest to clients the benefits of an attorney, so the ease of the opt-out in the present study was not especially externally valid.

Third, most attorneys that I've discussed this research with, especially criminal-law attorneys, say that they would never communicate with their client in terms of numerical probabilities and they often do not know the exact delay until trial, so future work should study the impact of communication through informal probabilities like "you have a good shot of winning at trial" and delay ranges like "it will be at least a month before we will get in front of a judge" to see if the effects hold. Adding greater ambiguity to the plea-bargain situation may actually evoke a stronger influence of the participant's (and real criminal defendant's) personal characteristics.

Fourth, although I have observed plea bargaining in action while shadowing a Hennepin County Attorney in Minneapolis, no research to date has documented the extent of the negotiation that goes on between prosecutors and defense attorneys. During my observation, it depended heavily on whether the prosecutor had video evidence of the defendant performing the act. In those cases, the prosecutor drove a hard line and offered

one plea deal—and even if the defense attorney came back a second time to discuss, the deal did not change. Thus, although the plea-bargaining process is assuredly more dynamic than the single plea-bargain decision made in many experimental psychology-and-law studies, it may also be more dynamic in many cases than the titration procedures—with the prosecutor sometimes acquiescing and other times not. Future research should be mindful of this high variability in case negotiation as well as the potential for the plea-bargain decision-making process to take substantially longer than what is allowed for in experimental studies.

Fifth, all four dissertation studies used the same crime scenario, which involved criminal negligence while driving. Indubitably, this single crime is not representative of the full criminal code, and future work should attempt to replicate this dissertation's findings across crime categories involving a variety of *mens rea* (i.e., guilty mind) requirements. For example, many possession crimes do not require that the possessor is actually aware of the object on their person, so that would be another category of crimes that it would be important to test as a bridge to another category of crimes that requires knowledge of wrongdoing.[91]

[91] The variety of *mens rea* requirements in crimes is only one facet of crime types that may affect the psychological process of plea-bargain decision-making. The actual content of criminal behavior may also matter. For example, property crimes as opposed to drug and violent crimes may involve different resistance to accept guilty pleas. The criminal charge (i.e., felony vs. misdemeanor) may also matter.

Table 27

Study 4 Demographics

	Subjective Trial Aversion		
Models/Variables	*B*	*SE*	*95% CI*
Gender			
Other	62.08*	28.40	(6.27, 117.88)
Women	8.47	5.86	(-3.06, 19.99)
Gender			
Man	-62.08*	28.40	(-117.88, -6.27)
Women	-53.61[m]	28.39	(-109.29, 2.17)
Race			
Other	2.71	8.91	(-14.80, 20.21)
White	2.01	6.54	(-10.83, 14.85)
Gender*Race			
Gender Other	62.15	63.40	(-62.45, 186.74)
Women	4.54	10.43	(-15.95, 25.02)
Race Other	-14.24	14.24	(-42.21, 13.74)
White	1.52	9.33	(-16.81, 19.86)
Gender Other:Race Other	NA	NA	NA
Women:Race Other	28.40	19.12	(-0.18, 65.98)
Gender Other:White	-2.67	71.01	(-142.21, 136.87)
Women:White	0.20	13.12	(-25.58, 25.98)
Age	-0.08	0.21	(-0.48)
Age*Race			
Age	-0.04	0.44	(-0.90, 0.82)
Other	7.32	31.19	(-53.98, 68.62)
White	4.73	21.24	(-37.00, 46.47)
Age:Other	-0.12	0.73	(-1.55, 1.31)
Age:White	-0.05	0.51	(-1.06, 0.95)
Education	-7.53*	3.18	(-13.77, -1.29)
Education [ref: Middle School]			
High School	-5.04	63.74	(-130.30, 120.22)
Part of College	-13.59	63.09	(-137.56, 110.38)
College Graduate	-11.27	62.97	(-135.02, 112.48)
Graduate School	-29.11	63.02	(-152.95, 94.72)
Education [ref: College Grad]			
Graduate School	-17.84*	7.05	(-31.70, -3.99)
High School	6.23	11.90	(-17.16, 29.62)
Middle School	11.27	62.97	(-112.48, 135.02)
Part Of College	-2.32	7.64	(-17.33, 12.69)
Education [ref: Graduate School]			
College Graduate	17.84*	7.05	(3.99, 31.70)
High School	24.08*	12.13	(0.4, 47.91)
Middle School	29.11	63.02	(-94.72, 152.95)

Part Of College	15.53[m]	7.99	(-0.17, 31.22)
Political Affiliation	-3.58*	1.61	(-6.74, -0.43)
Gender*PTC			
Other	58.26[m]	32.86	(-6.06, 122.58)
Women	0.07	6.79	(-13.21, 13.35)
PTC	1.35***	0.03	(1.28, 1.42)
Other:PTC	0.05	0.23	(-0.40, 0.50)
Women:PTC	0.12*	0.05	(0.02, 0.21)
Gender*DUT			
Other	53.64 [m]	29.36	(-3.85, 111.12)
Women	9.25	6.06	(-2.62, 21.12)
DUT	0.003	0.06	(-0.11, 0.12)
Other:DUT	0.45	0.40	(-0.33, 1.23)
Women:DUT	-0.04	0.08	(-0.20, 0.12)
Education*PTC			
Edu_contin	-1.77	3.68	(-8.97, 5.44)
PTC	1.72***	0.10	(1.52, 1.92)
Edu_contin:PTC	-0.08**	0.03	(-0.13, -0.03)
Education*PTC			
Middle School	-88.98	72.88	(-231.38, 53.43)
High School	13.47	14.02	(-13.93, 40.88)
Part of College	0.67	9.23	(-17.37, 18.72)
College Graduate	-1.98	8.16	(-17.92, 13.95)
PTC	1.24***	0.04	(1.16, 1.32)
Middle School:PTC	1.63**	0.51	(0.64, 2.63)
High School:PTC	0.15	0.10	(-0.04, 0.34)
Part of College:PTC	0.21**	0.06	(0.08, 0.33)
College Graduate:PTC	0.27***	0.06	(0.16, 0.39)
Education_contin*DUT			
Education_contin	-7.31*	3.29	(-13.75, -0.87)
DUT	0.03	0.18	(-0.32, 0.39)
Education_contin:DUT	-0.01	0.04	(-0.10, 0.08)
Race*PTC			
Other	-4.11	10.36	(-24.39, 16.17)
White	-8.84	7.56	(-23.64, 1.38)
PTC	1.30***	0.04	(1.22, 1.38)
Other:PTC	0.12	0.07	(-0.02, 0.26)
White:PTC	0.15**	0.05	(0.05, 0.25)
Race*DUT			
Other	4.47	9.29	(-13.71, 22.65)
White	2.07	6.75	(-11.14, 15.28)
DUT	0.002	0.07	(-0.14, 0.15)
Other:DUT	-0.09	0.13	(-0.34, 0.16)
White:DUT	-0.003	0.09	(-0.18, 0.18)

Note. Only one participant was in the Middle school group.

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

Table 28

Study 4 Race Predicting Legal Cynicism and Criminal Justice System Beliefs

	Subjective Trial Aversion		
Models/Variables	*B*	*SE*	*95% CI*
Legal Cynicism ~ Race			
Other	0.57	0.76	(-0.93, 2.08)
White	-0.32	0.55	(-1.29, 0.75)
CJ Perception [Total] ~ Race			
Other	-28.67	28.08	(-83.85, 26.52)
White	28.12	19.55	(-10.30, 66.54)
CJ Negative Plea Bargaining ~ Race			
Other	-2.94	2.96	(-8.77, 2.88)
White	0.42	2.05	(-2.62, 4.45)
CJ [Trial] ~ Race			
Other	1.58	2.54	(-3.41, 6.57)
White	3.56*	1.77	(-0.09, 7.03)
CJ [Feels] ~ Race			
Other	-17.31	15.41	(-47.59, 12.96)
White	7.25	10.71	(-13.81, 29.30)
Procedural Justice ~ Race			
Other	-4.05*	-1.58	(-7.15, -.95)
White	-1.00	1.12	(-3.20, 1.19)

Table 29

Study 4 Attorney Advice and Factual Innocence Regressions on Subjective Trial Aversion

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2	*95% CI*
Advice Content [ref: Plea]			0.002	
No Advice	-4.60	7.90		(-20.1, 10.87)
Trial Advice	-9.25	6.45		(-21.9, 3.38)
Factual Innocence	-25.06***	5.66	0.02	(036.1, -14)
Factual Innoc.*Advice_Content*Trust				
Innocent	-80.93	64.25		(-207.87, 46.01)
Trial Advice	65.81	64.21		(-61.05, 192,67)
Trust	6.27	5.97		(-5.53, 18.07)
Innocent:Trial Advice	108.30	81.13		(-52.53, 268.61)
Innocent:Trust	6.32	6.85		(-7.21, 19.84)
Trust:Trial Advice	-10.66	6.78		(-24.04, 2.73)
Innocent:Trial Advice:Trust	-10.78	8.95		(-28.46, 6.90)
Factual Innocence*Advice [Given]			0.05	
Innocent	-53.39***	13.72		(-80.40, -26.38)
No Advice	-30.47*	13.47		(-57.00, -3.94)
Trial Advice	-27.73*	13.55		(-54.42, -1.04)
Innocent:No Advice	49.15*	19.04		(11.65, 86.66)
Innocent:Trial Advice	36.08[m]	19.15		(-1.65, 73.81)
Impulsivity*Advice*PTC			0.26	
Impulsivity	-0.31	1.75		(-3.71, 3.09)
No Advice	21.99	17.12	0.001	(-54.32, 12.30)
Trial Advice	-41.21*	17.61	0.003	(-75.47, -6.95)
PTC	1.35***	0.08	0.04	(1.18, 1.52)
Impulsivity:No Advice	-0.39	2.66		(--5.56, 4.78)
Impulsivity:Trial Advice	1.94	2.59		(-3.10, 6.97)
Impulsivity:PTC	-0.007	-0.01		(-0.03, 0.02)
No Advice:PTC	0.21[m]	0.12	0.001	(-0.03, 0.45)
Trial Advice:PTC	0.43***	0.12	0.002	(0.19, 0.68)
Impulsivity:No Advice:PTC	0.006	0.02		(-0.03, 0.04)
Impulsivity:Trial Advice:PTC	-0.02	0.02		(-0.06, 0.01)

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001

Table 30

Study 4 Remaining Subjective Trial Aversion Hypothesis-Testing Regressions

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
Factual Innocence*PTC			0.24	
Innocent	-32.88***	6.58	0.007	(-45.78, -19.99)
PTC	1.35***	0.03	0.12	(1.28, 1.41)
Innocent:PTC	0.11*	0.05		(0.02, 0.20)
PTC*DUT			0.22	
PTC	1.41***	0.03	0.15	(1.35, 1.47)
DUT	0.23	0.78		(-1.30, 1.76)
PTC:DUT	-0.005	0.01		(-0.02, 0.02)
Impulsivity	-1.08	0.66	0.003	(-2.37, 0.21)
Innocence_Categ			.04	
Guilty	52.06***	7.76	.04	(36.90, 67.20)
Between	28.53***	8.39	.01	(12.10, 45.00)
Perceptions of Innocence (contin)	-0.92***	0.07	0.06	(-0.77, -0.47)
Perception of Guilt	0.63***	0.08	0.06	(0.49, 0.78)
Perception of Innocence_composite	-0.35***	0.04	0.06	(0.08, 0.05)
Blameworthiness	0.36***	0.04	0.06	(0.28, 0.45)
Procedural Justice	0.52^m	0.27	0.004	(-0.01, 1.05)
Procedural Justice*Race			0.01	
Procedural Justice	0.57	0.48	0.001	(-0.38, 1.51)
Other	-15.25	25/92	0.002	(-65.82, 35.32)
White	13.03	20.59		(-27.15, 53.32)
Procedural Justice:Other	0.81	0.82	0.001	(-0.79, 2.41)
Procedural Justice:White	-0.30	0.62	0.001	(-1.50, 0.90)
Perceptions of Guilt (contin)*PTC			0.28	
Guilt	0.80***	0.09	0.02	(0.63, 0.98)
PTC	1.56***	0.05	0.09	(1.47, 1.65)
Guilt:PTC	-0.003***	0.0007	0.001	(-0.00, -0.00)
Perceptions of Innocence (contin)*PTC			0.28	
Innocence	-0.61***	0.09	0.01	(-0.78, -0.44)
PTC	1.41***	0.04	0.12	(1.34, 1.48)
Innocence:PTC	-.0002	-0.0006		(-0.002, 0.001)
Perceptions of Innocence (ordinal)*PTC			0.27	
Innocence	-21.69***	4.32	0.007	(-30.15, -13.23)
PTC	1.44***	0.03	0.16	(1.38, 1.50)
Innocence:PTC	-0.05^m	0.03		(-0.12, 0.01)
Perceptions of Innoc_composite*PTC			0.29	
Innocence	-0.39***	0.05	0.02	(-0.49, -0.30)
PTC	1.41***	0.02	0.23	(1.36, 1.46)
Innocence:PTC	0.001^m	0.0003		(-0.00002, 0.001)
Blameworthiness*PTC			0.28	
Blame	0.41***	0.05	0.02	(-.30, 0.50)
PTC	1.50***	0.06	0.06	(1.39, 1.61)
Blame:PTC	-0.001^m	0.0003		(-0.001, -0.00002)
Impulsivity*PTC			0.23	
PTC	1.49***	0.04	0.13	(1.42, 1.56)
Impulsivity	0.13	0.76		(-1.36, 1.63)
PTC:Impulsivity	-0.02***	0.01	0.001	(-0.03, -0.01)
Impulsivity*DUT			0.003	

DUT	-0.07	0.06		(-0.19,0.05)
Impulsivity	-1.31[m]	0.68	0.002	(-2.65, 0.03)
DUT:Impulsivity	0.01	0.01		(-0.01, 0.03)
Factual Innoc*Impulsivity			0.02	
Innocent	-36.76***	8.47	0.02	(-53.32, -20.20)
Impulsivity	-2.33*	0.91	0.006	(-4.10, -0.55)
Innocent:Impulsivity	2.31[m]	1.29	0.003	(-0.21, 4.83)
Factual Innoc*Perceptions of Innoc (contin)			0.06	
Innocent	-10.22	9.26	0.001	(-28.33, 7.90)
Innocence (contin)	-0.63***	0.12	0.02	(-0.87, -0.39)
Innocent:Innocence (contin)	0.10	0.17		(-0.23, 0.43)
Factual Innoc*Perceptions of Guilt (contin)			0.06	
Innocent	-3.27	12.69		(-28.10, 21.55)
Guilt (contin)	0.61***	0.13	0.02	(0.35, 0.87)
Innocent:Guilt (contin)	-0.01	0.17		(-0.35, 0.34)
Factual Innoc*Perceptions of Innoc (composite)			0.06	
Innocent	-1.37	6.47		(-14.03, 11.30)
Innocence	-0.35***	0.07	0.02	(-0.49, -0.22)
Innocent:Innocence	0.02	0.09		(-0.16, 0.20)
Blameworthiness*PTC*Factual Innocence			0.28	
Blameworthiness	74.69***	20.21	0.003	(35.16, 114.22)
PTC	1.32***	0.13	0.009	(1.07, 1.58)
Innocent	-9.01	19.39		(-46.94, 28.92)
Blame:PTC	0.02	0.15		(-0.28, 0.33)
Blame:Innocent	-4.98	24.52		(-52.94, 42.99)
PTC:Innocent	-.20	0.15		(-0.09, 0.49)
Blame:PTC:Innocent	-0.15	0.18		(-0.51, 0.22)
Blameworthiness*PTC*Advice			0.28	
Blameworthiness	75.70**	22.98	0.003	(3085, 120.60)
PTC	1.63***	13.66	0.01	(1.36, 1.89)
Plea Advice	7.70	22.03		(-35.30, 50.74)
Trial Advice	5.69	21.22		(-35.74, 47.15)
Blame:PTC	-0.18	0.17		(-0.52, 0.17)
Blame:Plea	16.52	28.49		(-39.13, 72.13)
Blame:Trial	-4.15	27.75		(-58.36, 50.02)
PTC:Plea	-0.27	0.17		(-0.59, 0.06)
PTC:Trial	-0.06	0.16		(-0.38, 0.25)
Blame:PTC:Plea	0.10	0.21		(-0.32, 0.51)
Blame:PTC:Trial	-0.002	0.21		(-0.41, 0.41)

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001

Table 31

Study 4 Procedural Justice Hypothesis Testing

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_a	*95% CI*
Factual Innoc [Innocent]	-2.82**	0.99	0.02	(-4.78, -0.87)
STA* Factual Innoc			0.02	
STA	0.02[m]	0.01		(-0.001, 0.05)
Innocent	0.58	2.68		(-4.68, 5.84)
STA:Innocent	-0.02	0.02		(-0.05, 0.01)
Delivery [Not Asked]	-6.68***	0.95	0.09	(-8.55, -4.80)
Delivery*Advice Content			0.54	
Not Asked	-2.34	2.18		(-6.63, 1.95)
Plea Advice	18.52***	2.14		(14.31, 22.73)
Trial Advice	18.23***	2.14		(14.04, 22.44)
Not Asked:Plea Advice	0.83	2.44		(-3.96, 6.62)
Not Asked:Trial Advice	1.90	2.44		(-2.89, 6.69)
Factual Innoc *Advice			0.68	
Innocent	-5.22***	1.49		(-8.16, -2.28)
No Advice	-20.83***	1.48		(-23.75, -17.90)
Trial Advice	-1.20	1.48		(-4.13, 1.72)
Innocent: No Advice	2.86	2.10		(-1.28, 6.99)
Innocent:Trial Advice	3.85[m]	2.12		(-0.33, 8.02)

Table 32

Study 4 Attorney Trust * Attorney Advice Content on Subjective Trial Aversion

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_a	*95% CI*
Advice Content*Trust			0.17	
Trial Advice	153.39***	30.80		(92.55, 214.23)
Attorney Trust	13.38***	2.50		(8.44, 18.32)
Trial Advice:Trust	-19.66	3.58		(-26.74, -12.58)

[m].05 ≤ *p* ≤ .1. *$p < .05$. **$p < .01$. ***$p < .001$.

Table 33

Study 4 Opted-In for Attorney Advice: Impulsivity*Advice Content *PTC

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
Impulsivity*Advice Content*PTC			.21	
Impulsivity	1.23	1.53		(-1.75, 4.21)
Trial Advice	1.62	14.52		(-26.70, 29.95)
PTC	1.59***	0.07	.08	(1.45, 1.72)
Imp.:Trial Advice	-2.59	2.18	.001	(-6.85, 1.67)
Imp.:PTC	-0.06***	0.01	.006	(-0.08, -0.04)
Trial Advice:PTC	-0.37***	0.10	.002	(-0.56, -0.17)
Imp.:Trial Advice:PTC	0.08***	0.02	.005	(0.05, 0.11)

Note. [m].05 ≤ *p* ≤ .1. *$p < .05$. **$p < .01$. ***$p < .001$.

Figure 33

Studies' 3 and 4 Race*Probability of Trial Conviction Interaction on Subjective Trial Aversion

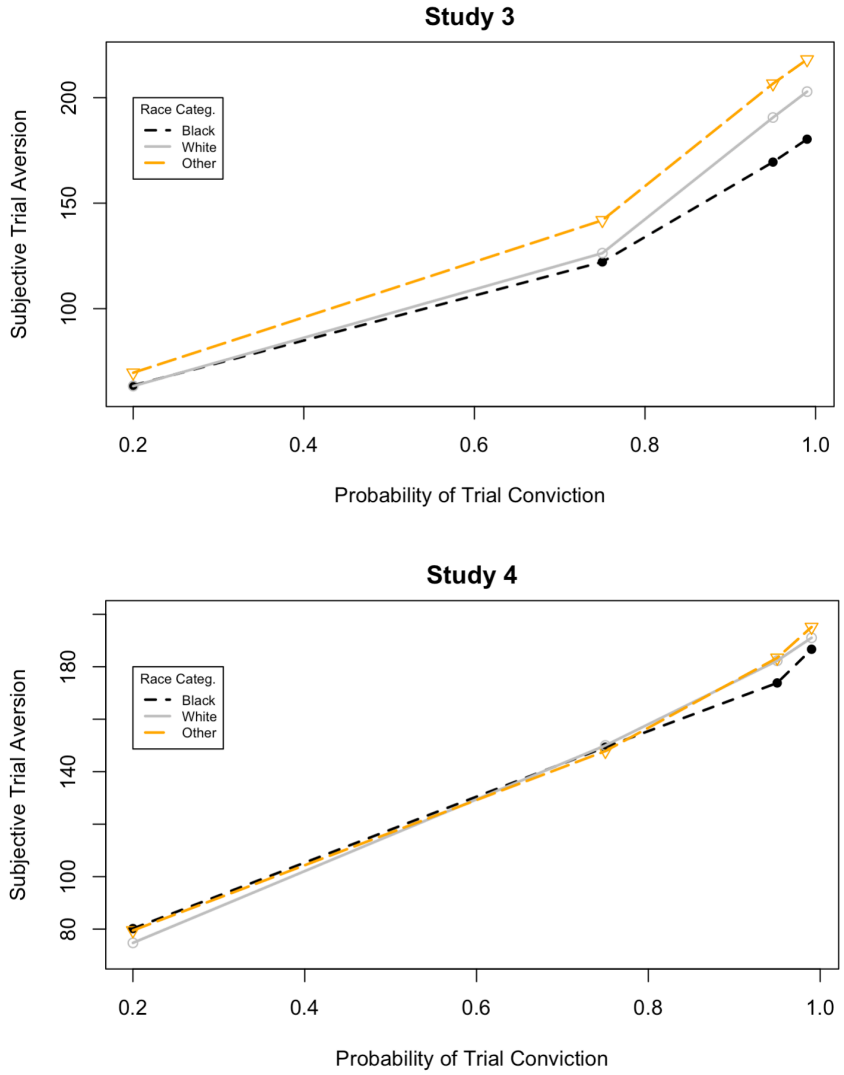
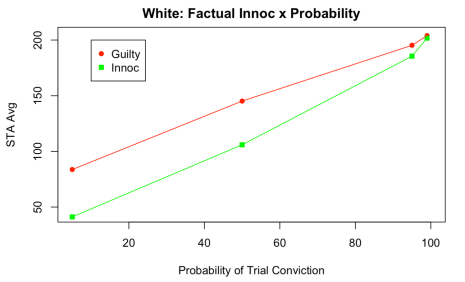
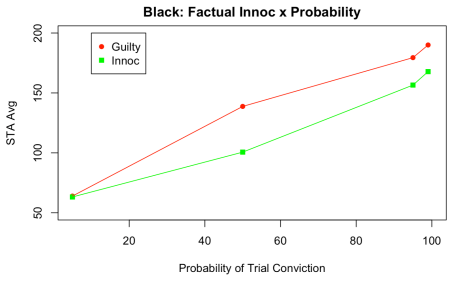


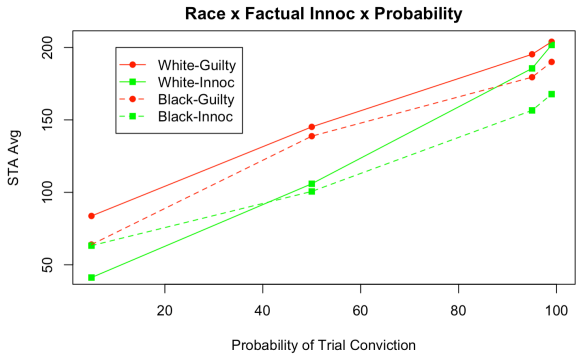
Figure 34

Studies' 3 and 4 Race*Probability of Trial Conviction*Factual Innocence Interaction on Subjective Trial Aversion

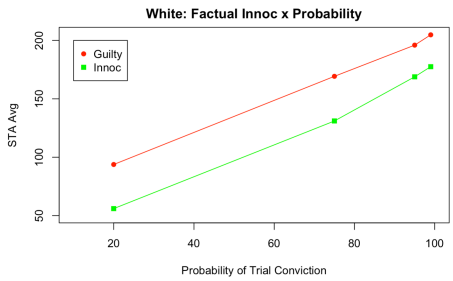
Study 3

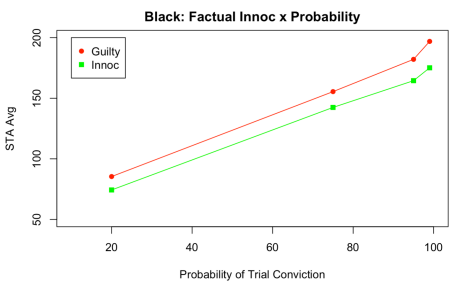






Study 4





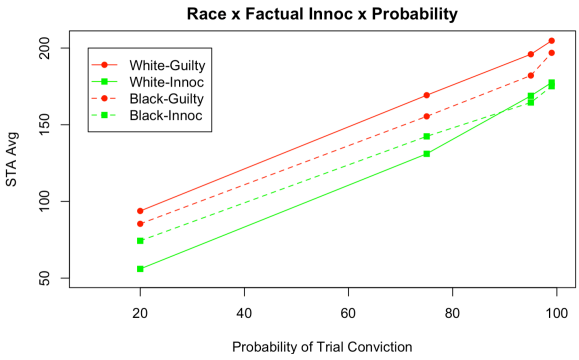


Figure 35

Study 4 Advice Content*Factual Innocence Predicting Subjective Trial Aversion

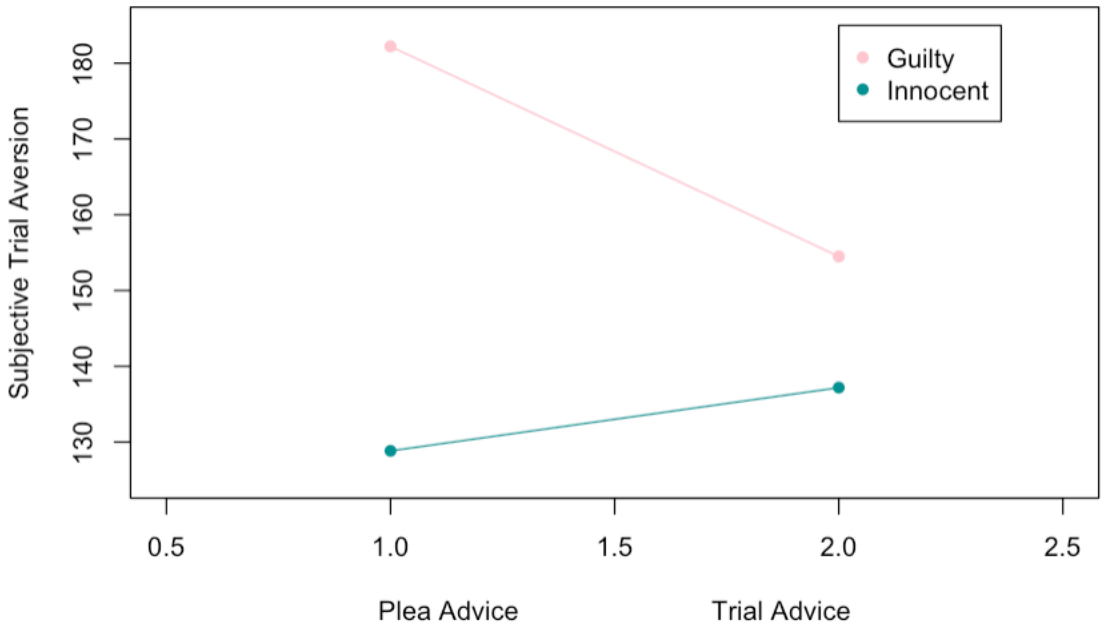


Figure 36

Study 4 Impulsivity*Probability of Trial Conviction Predicting Subjective Trial Aversion

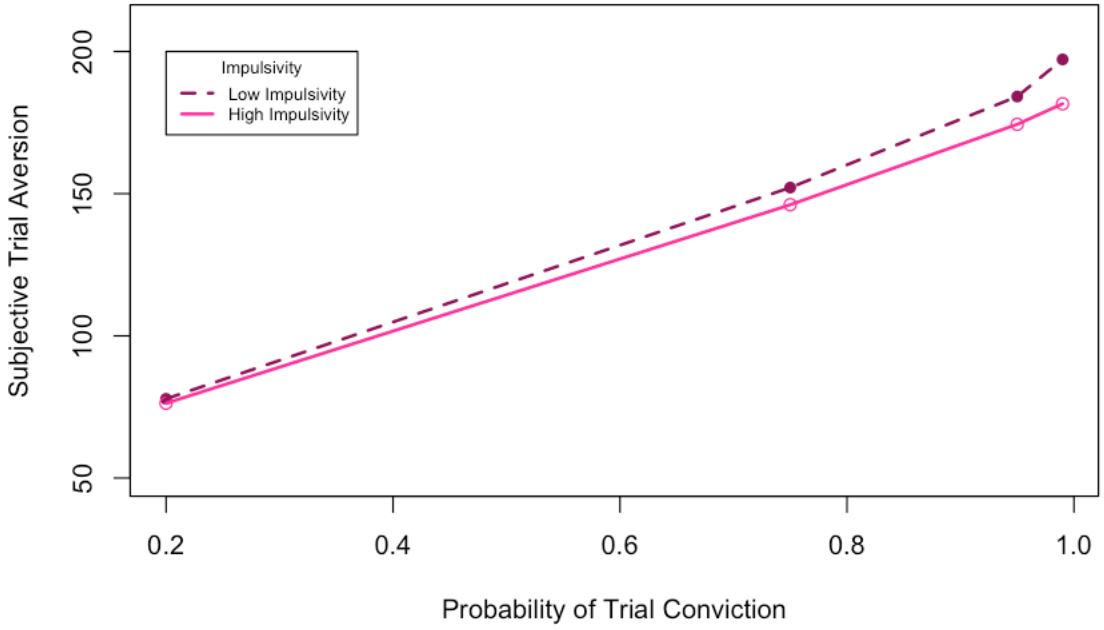


Figure 37

Study 4 Blameworthiness*Probability of Trial Conviction Predicting Subjective Trial Aversion

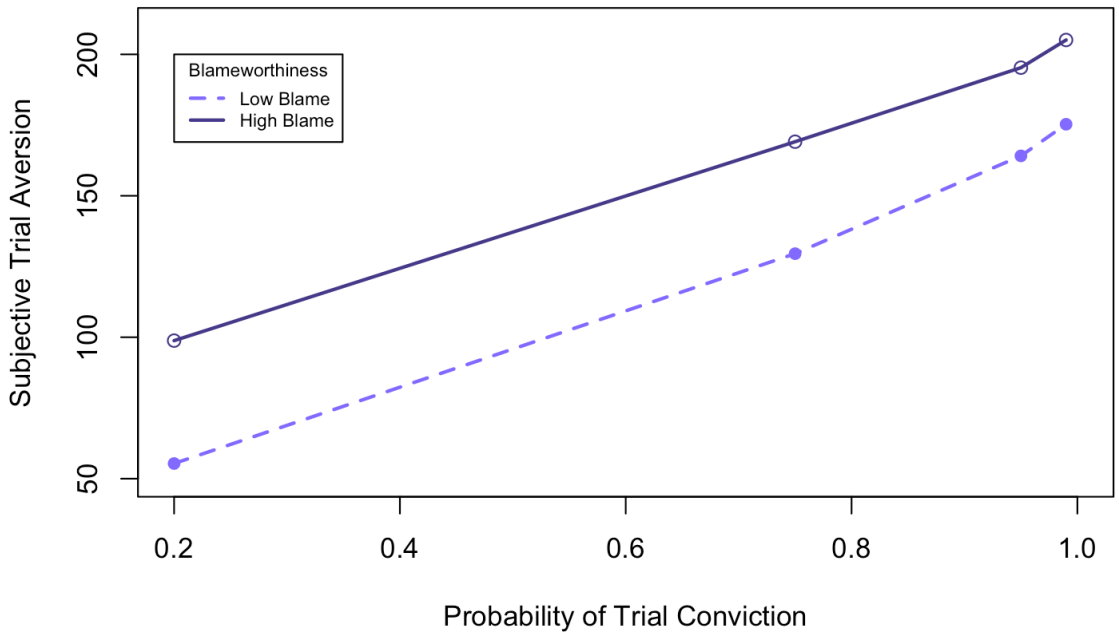


Figure 38

Study 3 and Study 4 Subjective Trial Aversion's Overlapping Histograms by Factual Innocence

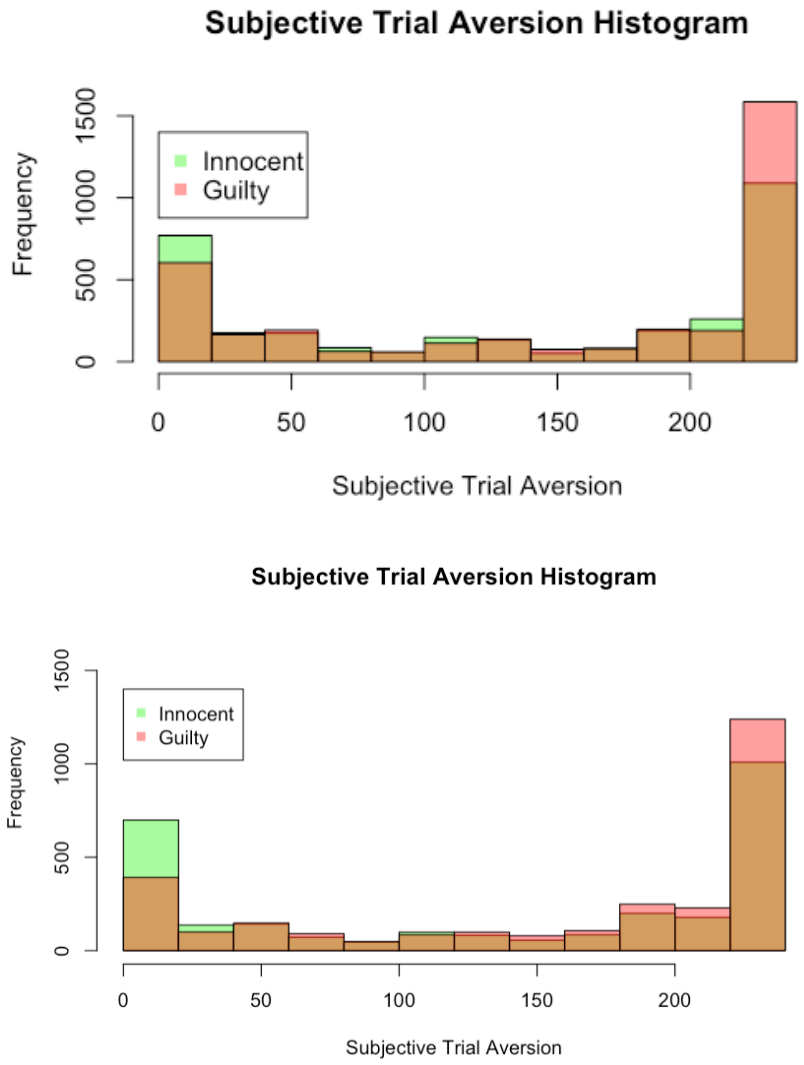


Figure 39

Study 4 Factual Innocence*Probability of Trial Conviction on Subjective Trial Aversion

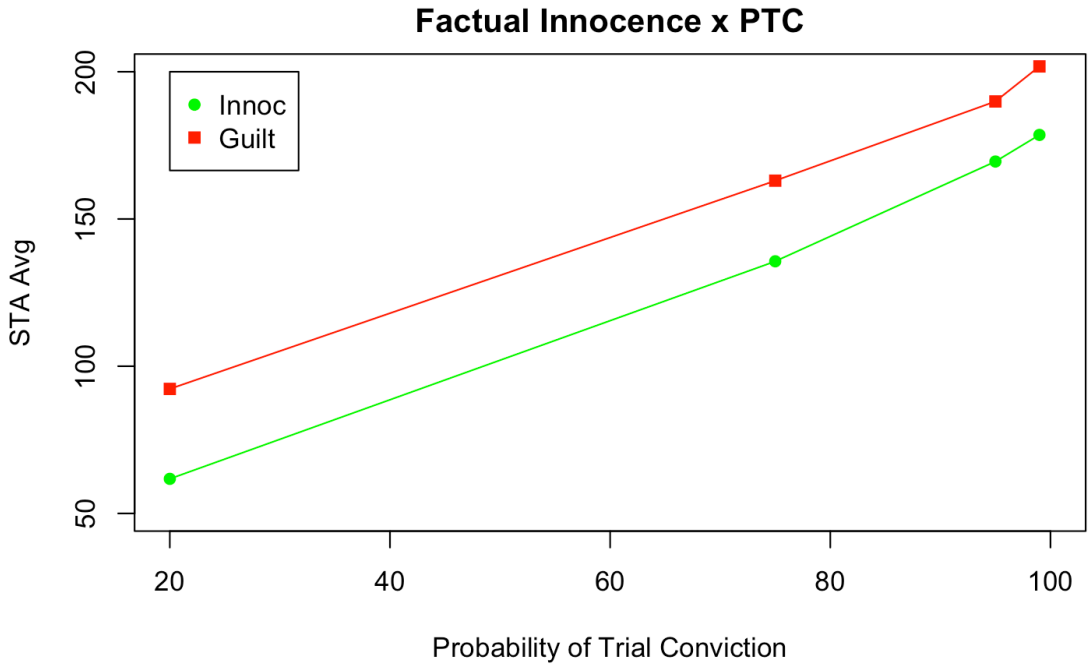
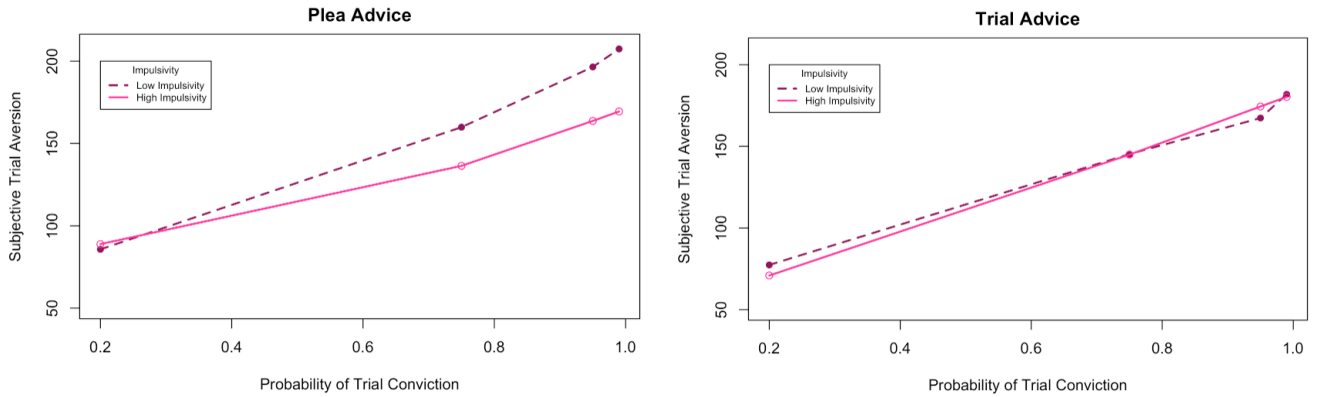
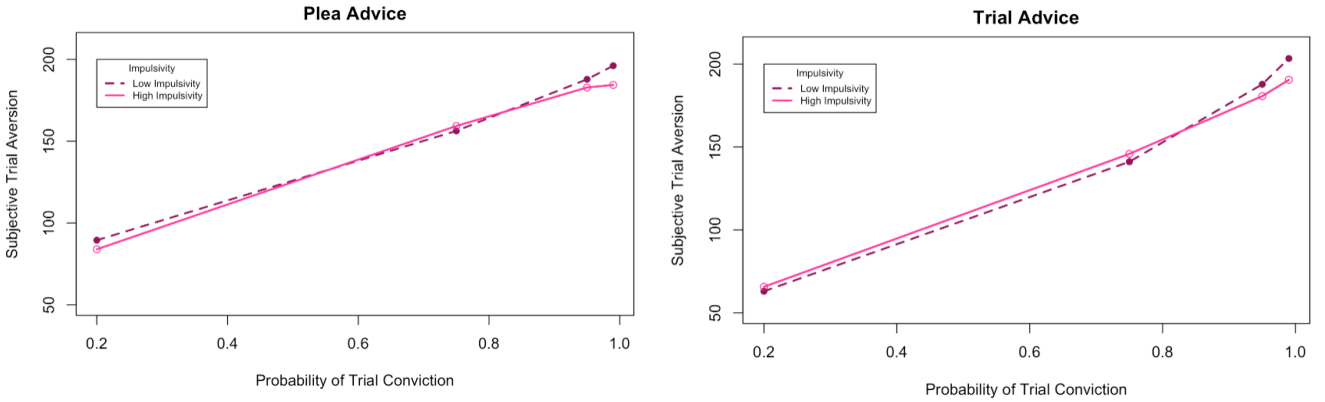


Figure 40

Study 4 Asked vs. Given Attorney Advice: Probability*Impulsivity*Advice Content on Subjective Trial Aversion

Opted In	
Given	

Note. Top panel is using the subset of participants randomly assigned to the Advice Delivery's Asked condition, and they replied "yes," thus opting in for advice and being randomly assigned to receive either Plea or Trial advice. The bottom panel is using the subset of participants randomly assigned to Advice Delivery's Not Asked condition.

Chapter 6: General Discussion

The broadest goals of this dissertation are to understand plea-bargain decision-making and contribute to discounting theory by studying the non-monetary loss commodity inherent to plea bargaining: criminal sanctions. This general discussion will first highlight key implications of the present work's emphasis on the person-by-situation approach for discounting theory, then outline practical implications of the work for the plea-bargaining system, and finally describe limitations and future studies.

Adopting the person-by-situation approach from personality and social psychology in this dissertation highlights the ways in which personal and situational features can qualify the seemingly straightforward human tendency to like immediate and certain good things and dislike immediate and certain bad things. First, as mentioned in Chapter 1, that general human tendency is qualified by non-monetary losses evincing reverse discounting such that people sometimes prefer to get bad outcomes over with rather than delay them (see, e.g., Harris, 2012). In addition to this broad situational moderator of commodity valence and type, the use of the person-by-situation approach produced hypotheses about broad group-level differences in the likelihood to accept pleas based on person variables like gender and situation variables like factual innocence.

The person-by-situation approach also historically has focused on how methodological features influence findings. For example, strong experimental situations have been shown to produce near-universal participant responses, whereas weak experimental situations, allowing for greater variation in response, have the tendency to detect dispositional, or personal, differences in a sample (see Mischel, 1997; Monson & Snyder, 1977). The present research, too, was attuned to how the experimental situation

had the potential to shape participants' responses, and although the manipulated independent variables produced a relatively strong situation, all four studies measured a set of situated-person variables to attempt to capture the extent to which individual perceptions and interpretations varied within the experimental situation.

Theoretical Implications

The theoretical implications of the present research can be categorized into three sub-types. First, there are theoretical implications concerning person variables to answer the question, do different types of people discount differently. Second, there are implications concerning the extent to which situational variables qualify discounting patterns in the plea-bargaining context. Last, the situated-person variables address the extent to which people's reactions to and perceptions of the experimental scenario influence their decisions.

Person Variables

Measuring and testing person variables such as gender and impulsivity addresses the question of whether different groups of people make different decisions when confronted with complex binary decisions. Testing the interaction between these person variables and the situational variables of probability and delay tests why the groups made different decisions. Specifically, testing the interaction between person variables and the probability and delay assesses whether the group-based differences are due to differential weighting of probability and/or delay, resulting in different degrees of discounting across groups.

This dissertation research suggests that men sometimes make different decisions than women do when they are confronted with complex, binary decisions (Studies 1 and

2 found significant effects, whereas Studies 3 and 4 found null effects), and that those gender-differences are best explained by different rates of probability discounting (Studies 2 and 4 found significant interaction effects, whereas Studies 1 and 3 found null effects) rather than different rates of delay discounting (only Study 1 produced a marginal interaction effect). Specifically, men were more likely to choose trial than women, and women's plea-bargain decisions were more influenced by probability than men's. It is possible that men, on average, interpreted acceptance of a guilty plea as a concession of sorts—or walking away from a fight—which motivated their willingness to go to trial.

This research also suggests that individuals with more education sometimes, as a group, make different decisions when confronted with complex binary decisions relative to individuals with less education (Studies 1 and 4 found significant effects, whereas Studies 2 and 3 found null effects). Those education-based differences are best explained by different rates of probability discounting (all four studies found significant interaction effects) rather than different rates of delay discounting (all four studies found null interaction effects). Specifically, people with graduate degrees chose to go to trial more than most other groups, and this may be because people with graduate degrees feel that having a criminal record is more detrimental to their lives than do people without graduate degrees, irreparably damaging their professional reputation and employability. People with graduate degrees were also less influenced by probability than most other groups, which may indicate that they were more skeptical to the omniscient probability of trial convictions they were presented with, instead coming to their own conclusion about their likelihood of conviction at trial.

Last, in terms of demographic differences, this research suggests that when large enough sub-samples are collected, Blacks and Whites sometimes make different decisions when confronted with complex binary decisions (Study 3 found a marginal effect, whereas Study 4 found a null effect). Although they only sometimes differ as a group in what decisions they make, Blacks and Whites consistently have different rates of probability discounting (Studies 3 and 4 found significant interaction effects) rather than different rates of delay discounting (Studies 3 and 4 found null interaction effects). Specifically, Whites accepted more pleas than Blacks, and Whites were more influenced by probability than Blacks. This may suggest that Blacks may be more skeptical of the plea-bargaining process, feeling that being told that their likelihood of conviction is increasing is a strategic ploy to coerce their guilty plea, making them more likely than Whites to choose to go to trial and less sensitive to probability.

This dissertation research suggests that the trait-level individual-difference of impulsivity more often than not does not cause people to make different decisions when confronted with complex binary decisions. However, across all four studies, people's impulsivity influences the degree to which they weighted probability in those decisions. Specifically, low-impulsivity people allowed increases in probability to affect their decisions more than high-impulsivity people. Additionally, people's impulsivity, combined with the situational feature of waiting in jail for trial, influenced the degree to which they weighted delay in their decisions. Specifically, low-impulsivity people waiting in jail allowed increases in delay to affect their decisions more than high-impulsivity people.

Overall, demographic characteristics influence the extent to which people discount probabilistically, and impulsivity influences the extent to which people discounting probabilistically *and* temporally. Thus, discounting scholars interested in the generalizability of their findings should test the extent to which monetary outcomes and other non-monetary outcomes are discounted by different groups.

Situation Variables

In this dissertation, Factual Innocence, Attorney Advice, and Waiting-for-Trial Location were the three tested situational moderators of probability and delay discounting in plea-bargain decision-making. Factual Innocence influenced participants' rates of probability discounting such that for innocent individuals, probability of losing at trial more steeply influenced the number (and harshness) of the pleas they accepted relative to guilty individuals. Waiting-for-Trial Location influenced participants' delay discounting such that for people out on bail, the delay of trial meant little to nothing to them, but for people waiting in jail, the delay of trial was significantly aversive. Thus, these two situational moderators were of a different kind: the former situational moderator was one that determines the *degree* of probability discounting, and the latter situational moderator was one that determined the *existence* of a delay effect. Thus, discounting of non-monetary losses is dependent on situational moderators, and future researchers studying new commodity types should carefully consider what those situational moderators might be.

Situated-Person Variables

Because blameworthiness and perceptions of guilt consistently interacted with probability of trial conversion to predict participants' decisions, these variables are prime

candidates to be conceptualized as mediators and measured in future studies after participants read the scenario but before the plea-bargain decisions. Although people vary on the extent to which they blame themselves for the car accident and child's injury as well as their perceptions of guilt, based on the current research's placement of these variables' in the survey it is unclear whether participants are responding differently to the scenario—the base facts—or to the probabilities manipulated within-participants in their plea-bargain decision-making, or both. Measuring perceptions of guilt and blameworthiness before the plea-bargain decisions would isolate the scenario's content as the potential cause of their guilt/self-blame (as opposed to the within-participants manipulation of probability), which then, if self-blame and perceptions of guilt still influence the impact of probability on decisions, suggests that people's differential reactions to the scenario is a lens through which they then see the plea-bargain decisions.

In sum, the present research demonstrates the various person and situated-person variables influence rates of discounting, at least in a non-monetary loss context.[92] Traditional discounting scholars, interested only in monetary outcomes, could also benefit from testing whether different groups of people, with different demographic characteristics, different trait-level tendencies, and different situated perceptions discount to varying degrees. Even if in monetary decisions these person and situated-person variables matter less, or not at all, that provides insight into why monetary gains and losses produce different discounting effects, especially for delay, from non-monetary losses like loss of freedom.

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[92] All three studies testing cross-construct models demonstrated that person and situated-person variables contributed unique value to explaining plea-bargaining behavior (see Tables 5, 17, and 24).

Legal Implications

Person Variables

Men make up the vast majority of criminal offenders, but there are over 10,000 women in federal prisons currently (Federal Bureau of Prisons, 2021). This dissertation suggests that women are more sensitive to the likelihood of their conviction relative to men, and accordingly accept more pleas than men when their probability of conviction is high. Criminal defense attorneys, armed with this information, may not want to disproportionately influence women to accept pleas relative to men. To avoid disproportionately influencing women to take pleas, defense attorneys may choose to communicate information about their client's likelihood of conviction in a different way, such as being especially careful not to overstate the likelihood of the woman defendant's conviction.

This dissertation also suggests that lower educational-degree achievement sensitizes people to the likelihood of their conviction relative to people with higher educational-degree achievement. So criminal defense attorneys may want to be especially careful not to overstate their client's likelihood of conviction at trial, especially when their client has only a high school degree or only completed part of college. This may mean that defense attorneys have to be careful about overstating their client's likelihood of conviction at trial with most of their clients because inmates of state and federal prisons tend to be less educated than the general U.S. population (see, e.g., Harlow, 2003).

Blacks are disproportionately represented in the United States' criminal justice system (Spohn, 2011), and if the last two studies' findings hold across time—especially

into more externally valid future studies—it would suggest that when confronted with the same choices between trial and plea-offers as white participants,[93] black participants are more resistant to accepting plea bargains on the basis of increasing probabilities of conviction. If this is the case, it suggests that they would exercise their trial rights more than similarly situated white defendants. This finding is the reverse of what was hypothesized by previous law-and-economics scholars (Savitsky, 2012) who believed that Blacks' skepticism about the criminal justice system would make them plea more. But this dissertation's finding is consistent with findings by Metcalfe and Chiricos (2018) who examined a random sample of 500 felony plea cases in Florida between 2002 and 2010 (out of over 275,000 records). Specifically, Metcalfe and Chiricos (2018) found that the odds of a plea decrease by about 46.4% when the defendant is black rather than white. Similar archival work done using a Tennessee county's public defender records from 2016 to 2019 also showed that black defendants were less likely to plead guilty as charged than white defendants, suggesting that they pled to a lesser charge and/or chose to go to trial more often (Ector, 2021). No research yet conclusively explains *why* this pattern exists, but from a psychological standpoint, it is possible that black defendants believe that their rights will be more protected by the trial process as opposed to the back-room deals of plea-bargaining.

Situation Variables

[93] This is a huge assumption. Likely, Blacks are confronted with harsher trial sentences, including mandatory minimums, and harsher plea-offers than Whites with substantially the same facts. In that vein, archival research has found that in a sample of misdemeanor marijuana cases in New York, black defendants were less likely to receive charge-reduced offers and were more likely to receive custodial-sentence offers (Kutateladze et al., 2016).

A higher probability of trial conviction causes people to be more willing to accept harsher pleas, and waiting in jail for longer lengths of time also makes them more willing to accept harsher pleas. In the criminal justice system's plea-bargaining, probability of trial conviction is linked to the extent of evidence that the prosecutor wields, and the strength of the evidence against a criminal defendant is a legally relevant and acceptable factor to influence plea decisions. The outcome of bail hearings is not legally relevant to the ultimate question of fact whether a criminal defendant beyond a reasonable doubt committed the crime charged, so the fact that the outcome of bail hearings impact plea decisions is problematic. Scholars have been arguing fervently for bail reform since the 1960s (see, e.g., Mitchell, 1969; Thomas, 2020), and ideally experimental work like this dissertation can be used to motivate reform.

Study 4 of this research also suggests that only individuals who are factually guilty are persuaded by their attorney's recommendation to go to trial or accept a plea, but this finding should be interpreted with caution because the attorney advice manipulation does not contain as much social force as an attorney would present in person, speaking with their client. Additionally, the fact that guilty individuals were more persuaded by attorney advice than innocents (Study 4) and innocents were more persuaded by probability of their conviction (Study 3 and Study 4) should not be overinterpreted by suggesting that these two groups value different situational cues. Rather, in plea-bargain decisions made outside of an experimental paradigm like those used in this dissertation research, probability of conviction would likely be

communicated by the defense attorney.[94] So while it is possible that innocent participants would be more influenced by the informal probabilities of conviction that attorneys communicate ("we've got a fighting chance") than guilty participants, that would need to be tested.

Furthermore, allowing participants to choose their situation influenced at least two processes. First, when participants opted in to receive attorney advice, that advice influenced guilty and innocent participants differently than their counterparts that had not been asked whether they wanted attorney advice. Figure 41 shows Figure 35's Given Advice graph with a slightly different y-axis scale on the right and an Opted In graph on the left. When guilty participants were simply given attorney advice, they were persuaded by that advice, but when they opted in, that advice did not have an impact on them. And no matter whether innocent participants were simply given attorney advice, or whether they opted in, they were not persuaded by the advice.[95] So, possibly, opting in for attorney advice made guilty participants more skeptical of the attorney's recommendation. In real-world plea-bargain decision-making simply being given a public defender may be analogous to simply being given advice, and choosing your own criminal defense attorney is akin to opting in for attorney advice, and future research may want to test the extent to which criminal defendants are influenced by their attorney's advice when their attorney is appointed versus selected because, ironically, when they

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[94] A translational study similar to Clatch and Borgida's (2021) Study 1 could be done to quantify attorney phrases such as "it's pretty likely" and "we don't have great odds," which can later be used in experimental manipulations of probability.

[95] Note that the Opted In graph on the left had a barely marginal effect of Advice on Innocents' decisions ($t(102) = 1.73$, $p = .09$) despite the sloping line between the two means.

choose their attorney they may be more resistant to that attorney's recommendations, feeling that the attorney's recommendation impinges their decisional freedom, producing reactance.

Second, allowing participants to choose their situation in Study 4 qualified the first three studies' finding that impulsivity influences the impact of probability on their plea decisions. Attorney advice nullifies the effect of impulsivity on probability discounting in plea-bargaining *except* when participants opted in for advice *and* the attorney gave plea advice. This effect is best explained by the fact that the high-impulsivity pink line in Figure 40's upper-left quadrant is less steeply sloped than all the other quadrants' high-impulsivity pink lines, meaning that when high-impulsivity individuals opt in for advice and are given plea advice there is a reactance effect such that they go to trial more than if they had opted in and received trial advice or if they had simply been given the plea advice without being asked. The null impulsivity-by-probability effect in the other three quadrants also highlights the importance of manipulating attorney advice in this setting—attorney advice is essentially a moderator of the moderator of impulsivity since impulsivity in past studies moderated the effect of probability discounting.

Situated-Person Variables

Self-blame and perceptions of guilt, on the one hand, are arguably extralegal factors. The extent to which people feel bad for their past acts does not necessarily indicate that they committed a crime—crimes are about the facts. On the other hand, a guilty mind *at the time* of the act (*mens rea*) is a well-known implicit requirement of holding a person criminally responsible, and some might argue that a guilty mind

immediately after the act is a good proxy for a guilty mind during the act, especially in a study using a hypothetical scenario. Regardless of whether these psychological tendencies of a criminal defendant are extralegal or not, defense attorneys should be mindful of their clients' perceptions of blame and guilt about the act in question because they may be a lens through which they view the entire encounter with their attorney.

In sum, defendants' situation-specific self-perceptions influence their plea decisions, and defense attorneys striving to be their clients' strongest advocates should be attuned to their clients' self-perceptions. The next section looks forward, identifying theoretical and practical next steps for research.

Future Studies

Future work can extend in at least two broad directions. First, discounting researchers may want to examine discounting patterns of other non-monetary loss contexts, such as health decisions, and determine whether in addition to having different patterns of delay discounting, monetary (and property-based) decisions exhibit less variability across different groups of people. Second, researchers interested in plea bargaining may want to examine other aspects of the plea-bargaining decision context.

The present body of work suggests that the dual discounting paradigm, which simultaneously measures delay and probability in binary choices can be used in non-monetary contexts to understand decision-making. Scholars have pointed to the potential use of discounting paradigms to explain non-monetary decisions like smoking cessation, exercising, and healthier eating (see, e.g., Petry & Madden, 2010; Vanderveldt et al., 2015), and Clatch and Borgida's (2021) Study 1 shows the initial rank-ordering that has to take place for non-continuous variables. Expanding the non-monetary commodities

experimentally examined by scientists will reveal whether all non-monetary losses are categorically distinct from monetary outcomes in terms of their reverse delay discounting and whether all non-monetary losses are similar to each other. Moreover, expanding the variables of interest beyond probability and delay, to person and situated-person variables, will help clarify the commodity-type-by-commodity-valence differences. What is it about non-monetary losses that make people's reactions to them more variable? Why are they different from monetary losses *and* non-monetary gains? These are questions for future researchers to tackle.

The present paradigm, which measures likelihood of accepting a plea bargain as well as the harshness of a plea someone would be willing to accept, can be used to test a variety of unanswered, yet important, real-world plea-bargaining questions. For example, how do mandatory minimums influence plea-bargain decision-making? How does charge bargaining (i.e., in addition to negotiating for a lower prison sentence, also negotiating for a low criminal charge, say from felony to gross misdemeanor) influence plea-bargain decision-making? How does crime type influence these patterns?[96] In addition, future researchers may want to operationalize attorney advice in a more externally valid way, with confederates or, at least, pre-recorded videos.

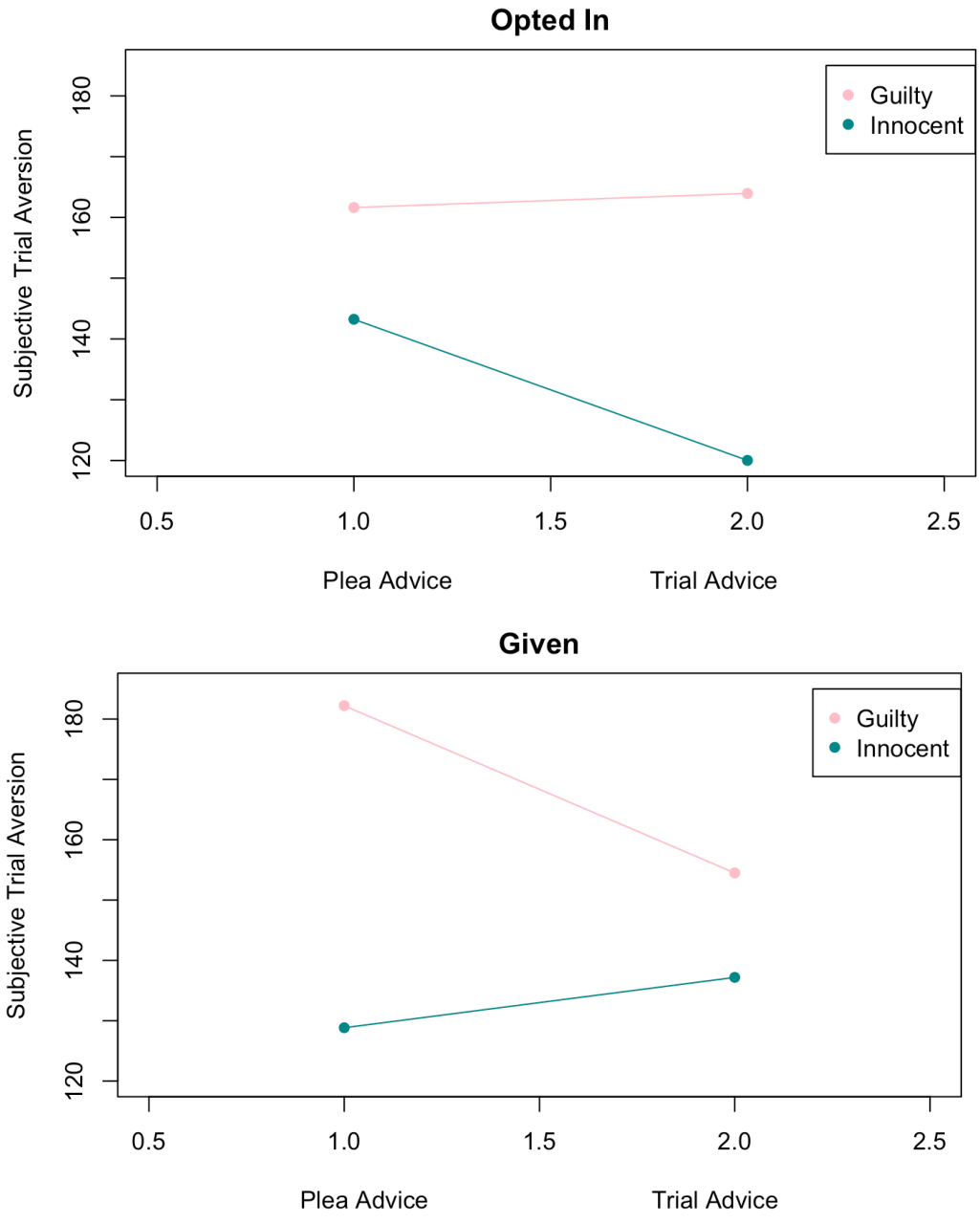
Conclusion

[96] A recent unpublished study conducted with the work of my research assistant, Jessica Berman, and with funding from the American-Psychology-Law Society's Undergraduate Research Award, manipulated Crime Type using this dissertation's negligent driving crime scenario as one of its two levels and designed a negligent fire crime as the other level. Preliminary findings suggest that the Factual Innocence, Delay, and Probability effects are consistent across both crime types. This initial step is promising, and future studies should expand to study crimes that involve various *mens rea* requirements—not just negligence.

This dissertation work aimed to improve our understanding of how criminal defendants make plea decisions as well as to inform discounting theory. Criminal defendants seem likely to be making nuanced plea decisions based on both situational factors such as their likelihood of conviction at trial, their factual innocence and, if they are not out on bail, the time until their trial date as well as personal factors like defendant gender, race, and impulsivity. Discounting theory built its founding principles on single-discounting (i.e., not dual discounting) empirical studies of monetary gains, and this work's focus on the dual discounting of non-monetary losses may be an example of how to examine the boundary conditions of discounting theory by studying more complex decision contexts. Additionally, this work's emphasis on the person-by-situation approach to studying human behavior may provoke a richer understanding of the decisional processes at play in both gains- and losses-contexts. It is my hope that this work motivates both more non-monetary discounting studies and more plea-bargain decision-making studies.

Figure 41

Study 4 Asked vs. Given Attorney Advice: Factual Innocence*Advice Content on Subjective Trial Aversion



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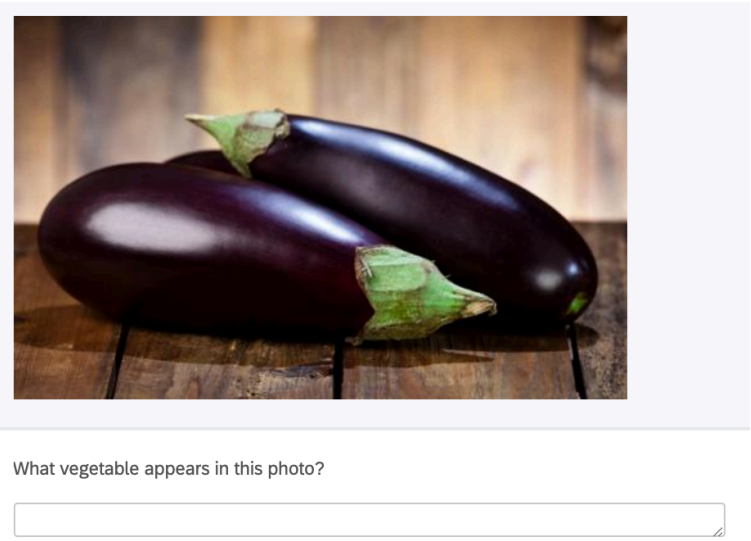
List of Supplemental Materials

SM 1.

Eggplant Data Quality Check



Note. To detect VPN-use to hide participants' lack of presence in the United States, the picture of eggplants was used to exclude participants suspected of not being in the United States. The name "aubergine" is used in the UK, Ireland, and France, and the name "brinjal" is used in South Asia. Sixty-three participants called the eggplants brinjal and thus were excluded.

SM 2.

Attention Checks, Reading Comprehension Questions, & Exclusion Criteria

Most modern theories of decision making recognize that decisions do not take place in a vacuum. Individual preferences and knowledge, along with situational variables can greatly impact the decision process. To demonstrate that you've read this far, just go ahead and select both red and green among the alternatives below, no matter what your favorite color is. Yes, ignore the question below and select both of those options.

What is your favorite color?

- ☐ White
- ☐ Black
- ☐ Blue
- ☐ Red
- ☐ Purple
- ☐ Green
- ☐ Pink

Most modern theories of decision making recognize that decisions do not take place in a vacuum. Individual preferences and knowledge, along with situational variable can greatly impact the decision process. To demonstrate that you've read this far, just go ahead and select both chocolate and crème brulee among the alternatives below, no matter what your favorite dessert is. Yes, ignore the question below and select both of those options.

What is your favorite dessert?

- ☐ Chocolate
- ☐ Cookies
- ☐ Ice Cream
- ☐ Fruit Tart
- ☐ Cake
- ☐ Cupcakes
- ☐ Crème Brulee

What happened in the scenario you just read?

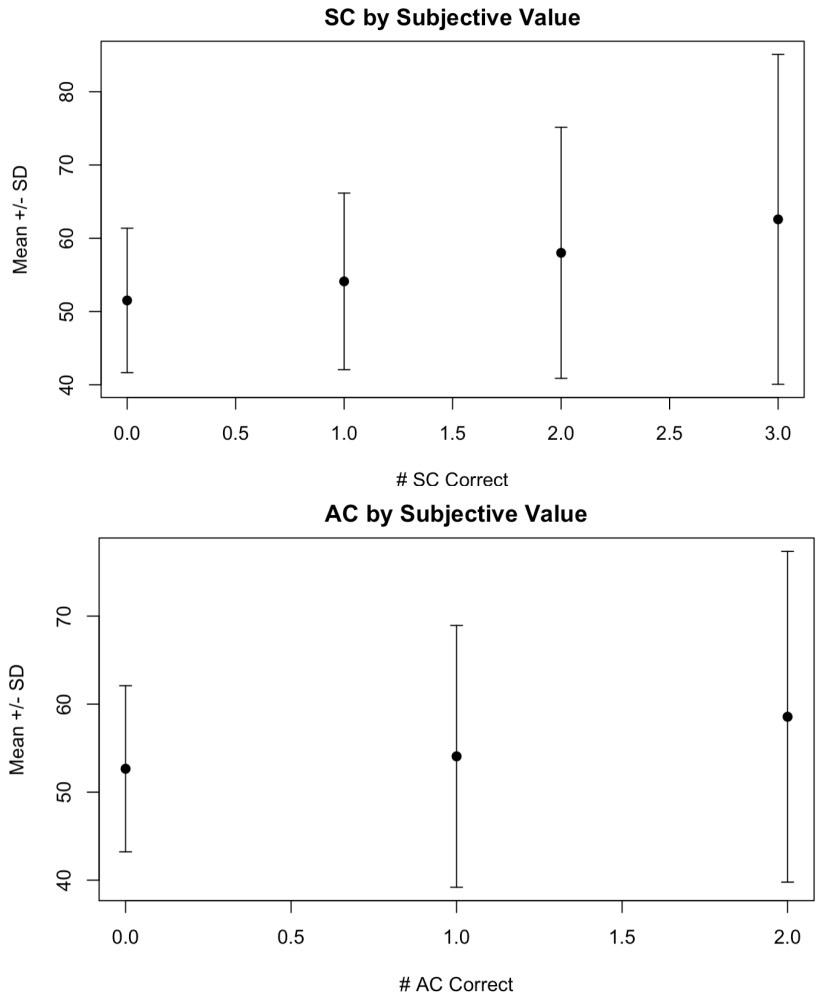
- ○ Kids were playing on a playground.
- ○ A reporter talked about cell phone technology.
- ○ A child got hit by a car.
- ○ A Fed-Ex man hit a child with his truck.

According to the scenario, what can cell phone technology prove?

- ○ That the phone was off during the accident.
- ○ That the phone received and sent text messages.
- ○ That the texts were hand-typed.
- ○ That the texts were voice-activated.

According to the scenario, what crime were you charged with?

- ○ Negligent driving resulting in physical injury, a felony.
- ○ Negligent driving resulting in physical injury, a misdemeanor.
- ○ Negligent driving resulting in physical injury, a gross misdemeanor.
- ○ None of the above.



	Failed	Passed	Passed %
SC1	223	301	57%
SC2	212	312	60%
SC3	160	364	69%

Note. The first two questions are the two attention checks used in Study 1. The next three questions are the three reading comprehension or "scenario" questions. The next two figures are typical of a Shirker analysis and show the mean Subjective Trial Aversion of participants grouped based on their number of scenario questions that they answered correctly and the number of attention check questions that they answered correctly. These Shirker graphs were not as clear-cut as desired because the error bars are substantially

overlapping. However, the comprehension and attention rates were not ideal, so we excluded any participant that did not answer at least Scenario Question #1 *or* #3 correct because it was imperative to the study that the participant knew they were the subject of a criminal charge. In order to be included we also required that participants got at least one of the two Attention Check items correct, especially considering the second attention check started off with the same language, so should have flagged even the minimally attentive reader to pay close attention.

SM 3.

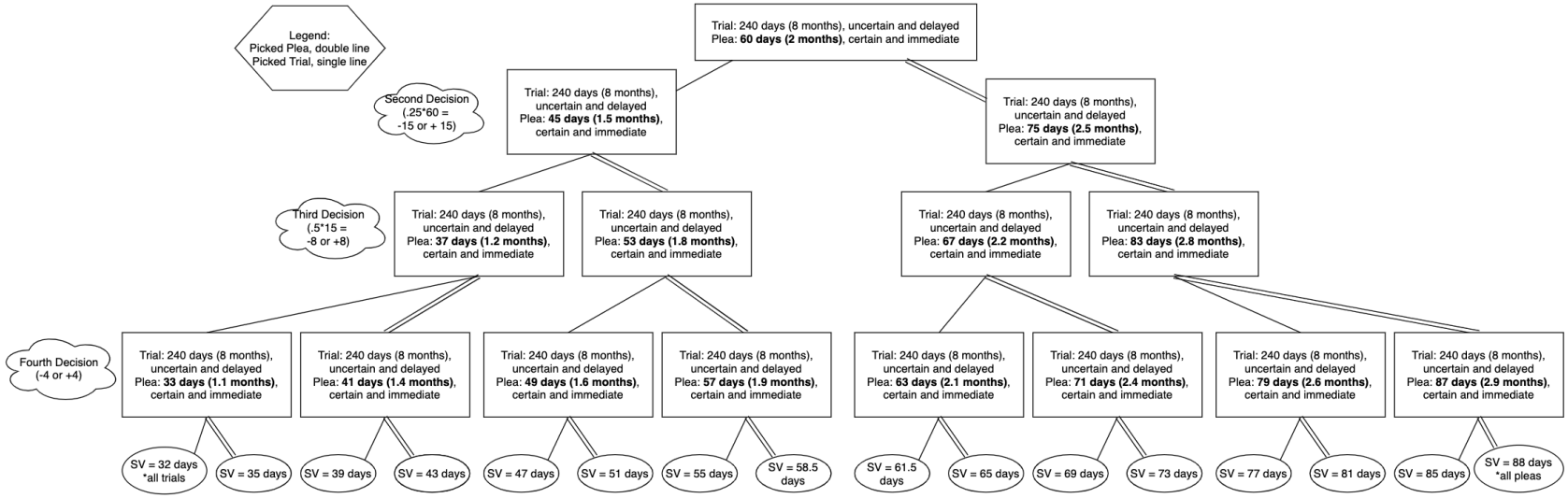
Study 1 Hypothetical Scenario

You were driving within the speed limit in a residential area, when you received a text from your friend. You used the voice-activation feature to read the text to you. As you were dictating your response, a child ran in front of your car, chasing a ball. You slammed on your brakes, but your vehicle struck the child, breaking his leg. The police were called and you have been charged with negligent driving resulting in physical injury, a felony.

While it is legal to send texts on your cell phone in hands-free mode, it is not legal to hand-type a text while driving. The cell phone technology can demonstrate that you received and sent text messages at the time of the accident, but it cannot establish whether the texts were hand-typed or voice-activated. However, a Fed-Ex delivery employee was in the vicinity during the accident and remembers your head was down with your gaze in your lap at the time of the incident.

SM 4.

Study 1 Example Plea-Bargaining Decision Tree (& Study 2 Original Titration)



Note. Each participant saw the top decision (with probability and delay specified instead of "uncertain and delayed") and then, based on their response, they saw a second decision. If they selected the plea in the first decision, then they saw the second decision connected by the single line, running down to the left. If they selected trial in the first decision, then they saw the second decision connected by two lines, running down to the right. This continued for four decisions per delay for Study 1, and then reset for the next delay, starting the participant back at the top of the decision tree, cycling through five times (once for each level of Delay until Trial). In Study 2, participants cycled through this 20 times, once for each probability-delay combination.

SM 5.

Plea-Bargain Decision Instructions & Choices (Studies 1 & 2)

Instructions

Please read the details of your options below. When you have made a decision, click on the radio button of the option you prefer. When you have clicked on the radio button your answer will be automatically recorded and new options will appear on the screen. **Your new options may differ slightly so please review them carefully.**

Background Information

Taking a plea offer is effective immediately, whereas the decision to go to trial results in a delay of the sentence start date because trial does not start until **[DELAY]** from now, and the trial process could take up to a week. [Jail condition: During the time waiting for trial to start and complete you will be waiting in jail; note that credit for time served is at the prosecutor's discretion.] [Bail condition: During the time waiting for trial to start and complete you will be out on bail, preparing for trial, but otherwise maintaining your daily routines.] Based on the evidence, your lawyer thinks you have a **[PROBABILITY]% chance** you will be found **guilty** of the **felony** and be sentenced to **8 months in prison** (**[1-PROBABILITY]%** chance of being found not guilty).

The prosecutor has decided to charge you with a **felony**, and is asking for a sentence of **8 months in prison** if you choose to go to trial. However, the prosecutor is offering a plea deal of a **gross misdemeanor,** with a **jail** sentence of 60 days **(2** months**).**

Which option do you choose? Click on your preferred option.

- (**[1-PROBABILITY]% c**hance of freedom in trial in [**DELAY**]; **PROBABILITY**% chance of being found guilty of a felony and sentenced to 240 days (8 months) in jail
- 100% certainty of a gross misdemeanor with a sentence of 60 days (2 months) in jail starting today

Note. The text highlighted in blue is present only in Waiting-for-Trial Location's Jail conditions. The text highlighted in yellow is present only in the Bail conditions, and nothing was present in that space in the Ambiguous conditions.

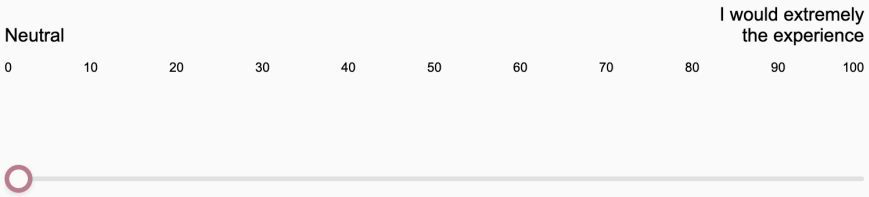
SM 6.

Study 1 Situated Person Variables: Contemplative Emotions, Blameworthiness, Innocence

Now please answer the following questions **imagining that you have not made your decision yet and you are considering the trial option.**

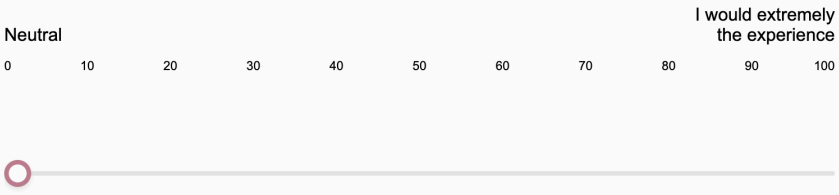
Please think about how you would feel right now if you had to **wait for** your trial.

How is the anticipation of trial? In other words, how do you feel right now while waiting for it? (Please slide the marker to anywhere on the line below to indicate your answer.)

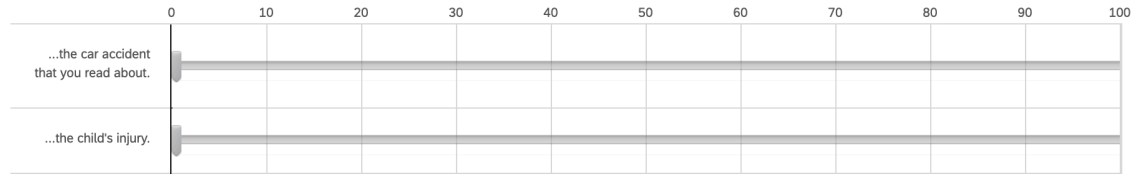


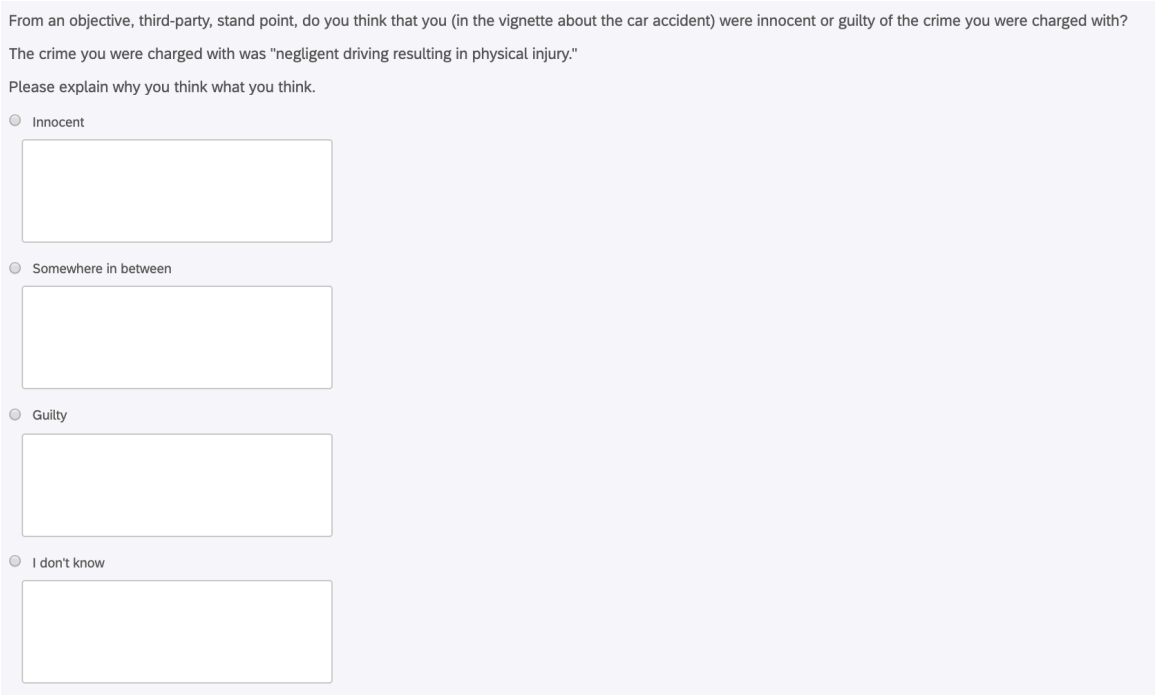
Now please think about how you would feel **during** a trial.

How would trial be? In other words, how would you feel during trial? (Please slide the marker to anywhere on the line below to indicate your answer.)



How much do you feel you are to blame for...





Note. The first two questions are the Negative Contemplative Emotion question stems. Both question stems had two sliders, one with upper anchor “I would extremely like the experience” and one with upper anchor “I would extremely dislike the experience.” So participants answered four slider questions to measure contemplative emotions, and participants were randomly assigned to an order of the like/dislike questions. Participants answer to the “wait for your trial” dislike item was subtracted from the “wait for your trial” like item; and the same was done for the two “during trial” questions. The original questions from Molouki et al. (2019): “How pleasurable or positive would the [anticipation/memory] of this event be? In other words, how would you feel right now while [waiting for/remembering] it?” and they responded on a scale ranging from 0 ([waiting/remembering] would be not at all pleasurable) to 100 ([waiting/ remembering] would be extremely pleasurable). Next, participants were asked, “How displeasurable or negative would the [anticipation/memory] of this event be? In other words, how would you feel right now while [waiting for/remembering] it?” and they responded on a scale

ranging from 0 ([waiting/remembering] would be not at all displeasurable) to 100 ([waiting/remembering] would be extremely displeasurable). The third screenshot shows the two Blameworthiness items. The fourth screenshot shows the question used to assess participants' perceived innocence.

SM 7.

Study 1 Trait-Level Individual-Difference Measures: Need for Cognitive Closure, System Justification, and Impulsivity

Please read the following statements carefully and rate your level of (dis)agreement with them.

	1 Completely Disagree	2 Disagree	3 Slightly Disagree	4 Slightly Agree	5 Agree	6 Completely Agree
I don't like situations that are uncertain.	○	○	○	○	○	○
I dislike questions which could be answered in many different ways.	○	○	○	○	○	○
I find that a well ordered life with regular hours suits my temperament.	○	○	○	○	○	○
I feel uncomfortable when I don't understand the reason why an event occurred in my life.	○	○	○	○	○	○
I feel irritated when one person disagrees with what everyone else in a group believes.	○	○	○	○	○	○

	1 Completely Disagree	2 Disagree	3 Slightly Disagree	4 Slightly Agree	5 Agree	6 Completely Agree
I don't like to go into a situation without knowing what I can expect from it.	○	○	○	○	○	○
When I have made a decision, I feel relieved.	○	○	○	○	○	○
When I am confronted with a problem, I'm dying to reach a solution very quickly.	○	○	○	○	○	○
I would quickly become impatient and irritated if I would not find a solution to a problem immediately.	○	○	○	○	○	○
I don't like to be with people who are capable of unexpected actions.	○	○	○	○	○	○

	1 Completely Disagree	2 Disagree	3 Slightly Disagree	4 Slightly Agree	5 Agree	6 Completely Agree
I dislike it when a person's statement could mean many different things.	○	○	○	○	○	○
I find that establishing a consistent routine enables me to enjoy life more.	○	○	○	○	○	○
I enjoy having a clear and structured mode of life.	○	○	○	○	○	○
I do not usually consult many different opinions before forming my own view.	○	○	○	○	○	○

ADAPTATION OF SYSTEM JUSTIFICATION SCALE
[1 (*strongly agree*) to 9 (*strongly disagree*), Likert]

Original Item	Modified Item
In general, you find society to be fair.	In general, I think the criminal justice system is fair. **#1**
In general, the American political system operates as it should.	In general, the criminal justice system operates as it should. **#2**
American society needs to be radically restructured. (**reverse-scored**)	The American criminal justice system needs to be radically restructured [**reverse scored**] **#3**
The United States is the best country in the world to live in.	The United States is the best country in the world to live in. **#7**
Most policies serve the greater good.	Most criminal justice policies serve to protect the public. **#8**
Everyone has a fair shot at wealth and happiness.	Everyone has a fair shot when they are tried for a criminal offense. **#9**
Our society is getting worse every year. (**reverse-scored**)	The criminal justice system gets worse every year [**reverse scored**] **#10**
Society is set up so that people usually get what they deserve.	Society is set up so that people usually get what they deserve. **#11**
	~ In America, a criminal defendant's right to a criminal trial serves to protect the innocent. **#4**
	~ In America, the plea-bargaining system problematically pressures innocent criminal defendants to plead guilty. [**reverse scored**] **#5**
	~ In America, a criminal defendant's ability to make a deal (i.e., a guilty plea deal) with the prosecution is usually for the defendant's benefit. **#6**

Please read the following statements carefully and rate your level of (dis)agreement with them.

	1 Strongly Agree	2	3 Agree	4	5 Neither Agree Nor Disagree	6	7 Disagree	8	9 Strongly Disagree
In general, I think the criminal justice system is fair.									
In general, the criminal justice system operates as it should.									
The American criminal justice system needs to be radically restructured.									
In America, a criminal defendant's right to a criminal trial serves to protect the innocent.									

	1 Strongly Agree	2	3 Agree	4	5 Neither Agree Nor Disagree	6	7 Disagree	8	9 Strongly Disagree
In America, the plea bargaining system problematically pressures innocent criminal defendants to plead guilty.									
In America, a criminal defendant's ability to make a deal (i.e., a guilty plea deal) with the prosecution is usually for the defendant's benefit.									
The United States is the best country in the world to live in.									
Most criminal justice policies serve to protect the public.									

	1 Strongly Agree	2	3 Agree	4	5 Neither Agree Nor Disagree	6	7 Disagree	8	9 Strongly Disagree
Everyone has a fair shot when they are tried for a criminal offense.									
The criminal justice system gets worse every year.									
Society is set up so that people usually get what they deserve.									

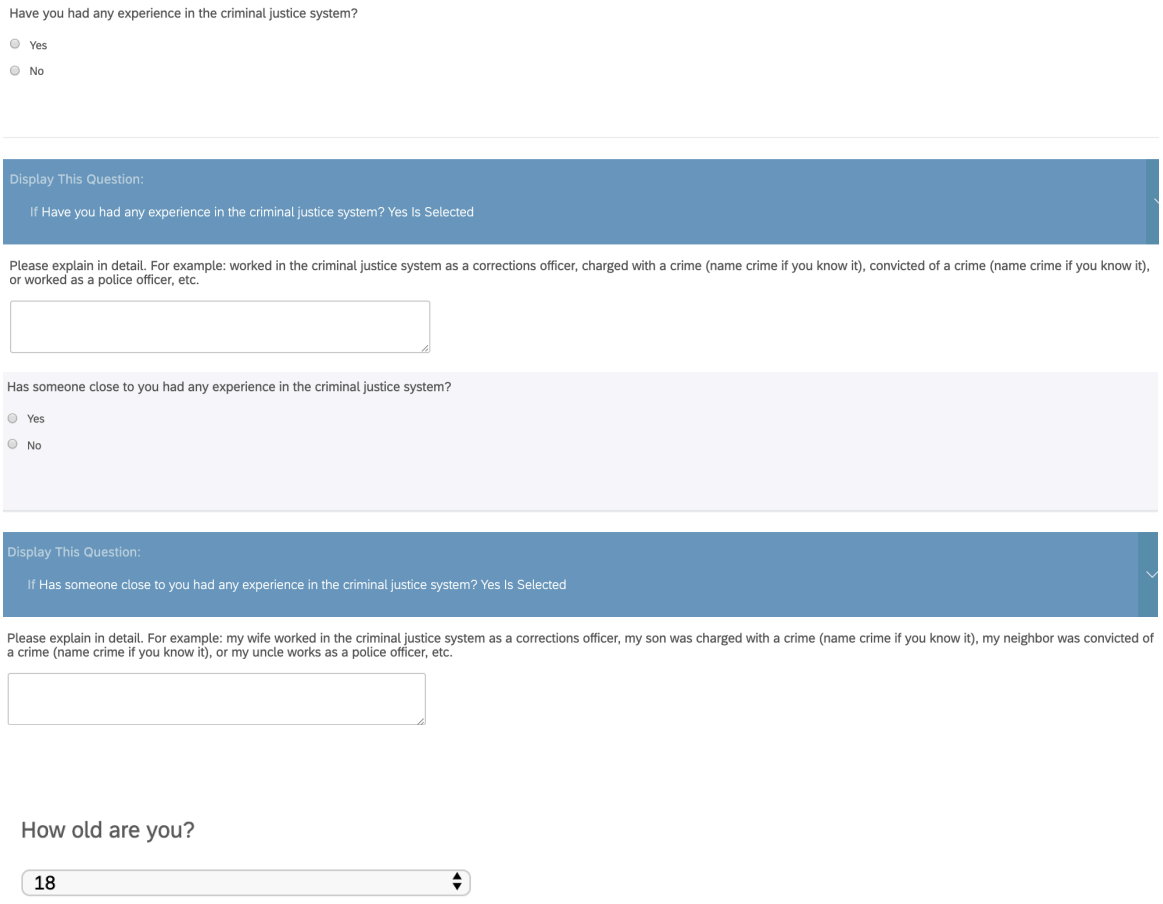
Please answer each question by selecting 'Yes' or 'No' for the following the questions. There are no right or wrong answers, and no trick questions. Work quickly and do not think too long about the exact meaning of the question.

	Yes	No
Do you often buy things on impulse?	○	○
Do you generally do and say things without stopping to think?	○	○
Do you often get into a jam because you do things without thinking?	○	○
Are you an impulsive person?	○	○
Do you usually think carefully before doing anything?	○	○
Do you often do things on the spur of the moment?	○	○
Do you mostly speak without thinking things out?	○	○
	Yes	No
Do you often get involved in things you later wish you could get out of?	○	○
Do you get so 'carried away' by new and exciting ideas, that you never think of possible snags?	○	○
Do you need to use a lot of self-control to keep out of trouble?	○	○
Would you agree that almost everything enjoyable is illegal or immoral?	○	○
Are you often surprised at people's reactions to what you do or say?	○	○
Do you think an evening out is more successful if it is unplanned or arranged at the last moment?	○	○
Do you usually work quickly, without bothering to check?	○	○
	Yes	No
Do you often change your interests?	○	○
Before making up your mind, do you consider all the advantages and disadvantages?	○	○
Do you prefer to 'sleep on it' before making decisions?	○	○
When people shout at you, do you shout back?	○	○
Do you usually make up your mind quickly?	○	○

Note. The first screenshots show the Need for Cognitive Closure items. The table and following screenshot show the original and adapted System Justification Scale items. Items that I added to the scale are marked with "~". The last screenshot shows the I-7's Impulsivity subscale items.

SM 8.

Study 1 Life Experience and Demographic Items: Criminal Experience, Driving and Accident Experiences, and Demographic Questions



What is your self-identified race? Check all that apply.

- [ ] White, Hispanic
- [ ] Non-Hispanic White
- [ ] Black or African American
- [ ] American Indian or Alaska Native
- [ ] Asian
- [ ] Native Hawaiian and Other Pacific Islander
- [ ] Other

What is your self-identified gender?

- ○ Male
- ○ Female
- ○ Other

What is your highest level of completed education?

Middle School

Do you drive a motor vehicle?

- ○ Yes
- ○ Maybe
- ○ No

Have you ever been involved in an automobile accident?

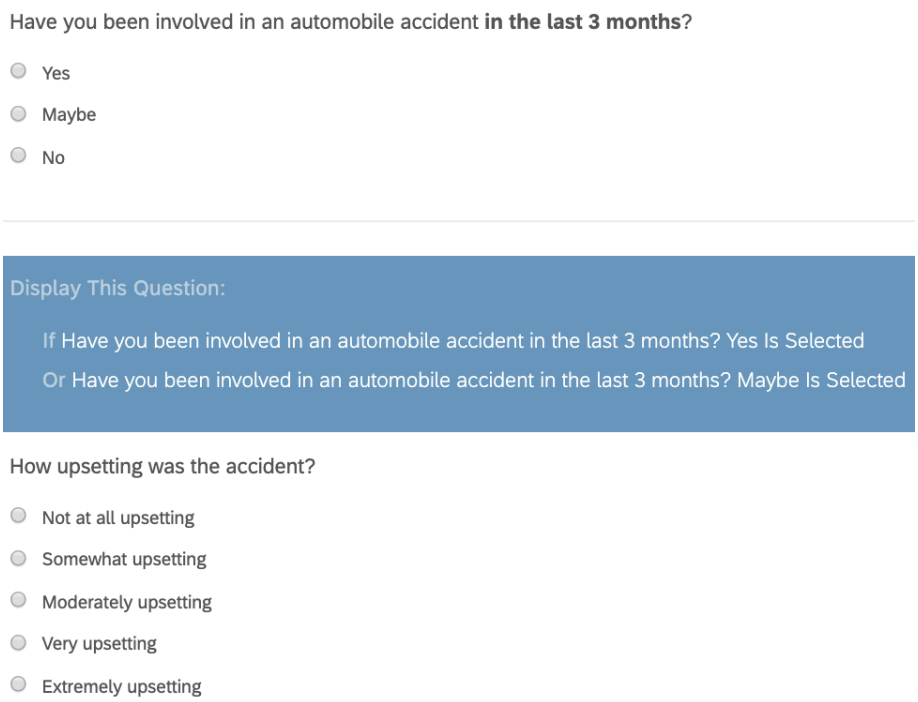
- ○ Yes
- ○ Maybe
- ○ No

Display This Question:

If Have you ever been involved in an automobile accident? Yes Is Selected
Or Have you ever been involved in an automobile accident? Maybe Is Selected

How upsetting was the accident?

- ○ Not at all upsetting
- ○ Somewhat upsetting
- ○ Moderately upsetting
- ○ Very upsetting
- ○ Extremely upsetting



Note. The first two screenshots show the criminal experience questions. The next series of screenshots show the demographic items, and the last group of screenshots shows the driving and accident questions (with their display logic). For Study 1, the variables pertaining to accident experience were calculated by counting "Yes I've been in an accident" as 1 and "No" as 0 and then multiplying the degree of upset the accident caused (1=not at all upsetting, 5=extremely upsetting).

SM 9.

Study 1 Qualitative Coding Manual

Qualitative Coding Overview

- The Excel Spreadsheet you will be working with contains participants' responses to the open-ended response questions (Q1-Q4) from Study 2. These variables Q1-Q4 make up the columns and each participant of the study has one row (rows 2-396). The themes (shown below) make up the four columns to the right of each question (the theme names appearing in the header cell).
- You will be going through the open-ended responses in order to code them based on the applicable themes.
- If you see Googled Shirker (or bot) responses like those below OR "NA" or "0" in response to all four questions, highlight the **whole row** in **purple**:
    - Bot response examples
        - "Plea bargains serve a purpose for courts. Some reasons prosecutors offer them include: Reducing the number of cases going to court."
        - "Plea bargains serve a purpose for courts."
        - Rule: two bot responses and you're out (full row highlighted)
    - Then, create a Word document with the original row numbers that are to be deleted (e.g., Rows deleted from dataset: 27, 29, 31, 33, 37…), confirm with co-RA to agree on which rows will be deleted.
    - Last, create a second tab in the same Excel document with those purple rows deleted
    - Lauren will use the second tab to compute kappas

Question Stems

- **Q1**) Why do you think most people take plea bargain deals? Please take a moment and be as specific as possible.
- **Q2**) When you chose a plea bargain deal, why did you choose it? Please take a moment and be as specific as possible.
- **Q3**) Why do you think most people choose to go to trial? Please take a moment and be as specific as possible.
- **Q4**) When you chose to go to trial, why did you choose it? Please take a moment and be as specific as possible.

General Procedure

- **STEP 1:** Start with Q1 and code for Innocence by reading each individual cell/response (starting with reading cell A2 and ending with A396).
    - **STEP 1a:** Since the themes for Innocence overlap, there are four columns each pertaining to the four sub-themes of innocence (columns B, C, D, E).

Type "1" in the cell of the applicable column if the response pertains to any of the four sub-theme codes. If it does not, type "0" in the cell.
    - For example, if the sentence reads, "To prove my innocence because I was not guilty," type "1" in columns A and B and "0" in columns C and D. See Innocence's sub-themes below.
- **STEP 2:** Repeat Step 1 for Q2, Q3, and Q4.
- **STEP 2:** Repeat Steps 1 – 2 for Delay theme, excluding Step 1a.
- **STEP 3:** Repeat Steps 1 – 2 for Probability theme, excluding Step 1a, EXCEPT
    - Instead of "1"s you will be typing an "A", "B", or "C" in the cell if the particular sub-theme is present. If no sub-theme is not present, enter a "0".
- **STEP 4:** Repeat Steps 1 – 2 for Punishment Amount theme, excluding Step 1a, EXCEPT
    - Instead of "1"s you will be typing an "A" or "B" in the cell if the particular sub-theme is present. If no sub-theme is not present, enter a "0".
- Note: if a response demonstrates that they are ignoring the question stem (e.g., talking about accepting a plea in response to Questions 3 and 4), then code a "0"
- Note: if you notice an odd response, look at other responses in that row to give context (e.g., is it a bot? is there some coherent pattern to the responses?)

Themes

Innoc_Code: "Innocence"

Code A: responses showing that the participant believed they were innocent
- (i.e. "To prove innocence")

Code B: responses showing participant believed they were not guilty
- (i.e. "I was not guilty")

Delay_Code: "Delay"

Q1 & Q2:

Code: responses showing that the immediacy of the plea/offer was attractive
- (i.e. "to get it resolved quicker")

Q3 & Q4:

Code: responses showing that the delay of the trial was attractive
- (i.e. "deal with it later")

Prob_Code: "Probability"

Q1 & Q2:

Code A: responses showing participant was **attracted** to the <u>certainty</u> of the plea
- (i.e., "I liked that the plea was a sure thing")

Code B: responses showing participant **didn't like** their <u>chances</u> at trial
- (i.e. "I didn't want to roll the dice")

Q3 & Q4:

Code A: responses showing participant was **attracted** by the <u>possibility of winning</u> at trial

- (i.e. “There was a 75% chance of conviction, so I liked the idea of a one in four chance of being free”)

Punish_Amt: “Punishment Amount”

Q1 & Q2: Note codes A, B, and G are distinct categories; you should not code the same phrase as two things but if responses mentions two things code them both. For example, “I wanted a nicer charge and lesser sentence” should be coded “A B”; if, on the other hand, “nicer charge” is alone in the response, code “G.”

Code A: responses showing participant wanted to avoid a certain criminal charge (e.g., felony vs. misdemeanor)

- (i.e. “As long as I wouldn’t have a felony on my record”)
- Has to be using “charge” as **more than** colloquial/short-hand for “criminal charge"

Code B: responses showing participant wanted to reduce sentencing/prison time

- (i.e. “To get the shortest sentence possible”)

Code G: responses showing *general* desire for lesser punishment

- CAN be “I wanted lesser criminal charge”
- Also includes: “lesser punishment”

Location

Code B: responses show that they were out on bail or living their life as usual while waiting for trial, and that affected their decision; This is most likely an attractive feature for trial (i.e., Q3 and Q4); also, if responses suggests that the jail option was the only possibility for never doing jail time (which implies they believed they were out on bail and would not be convicted at trial).

Code J: responses show that they were in jail while waiting for trial, and that affected their decision; MAKES TRIAL LESS ATTRACTIVE, SO MOSTLY IN Q1 AND Q2, BUT MAYBE Q3/4 AND TIME SERVED MAKES TRIAL MORE ATTRACTIVE

Qualitative Coding Kappas

Code	Question 1	Question 2	Question 3	Question 4
Innoc_A	.663	1.00[97]	.936	.899
Innoc_B	1.00[98]	.708	.68	.775
Delay	.76	.752	.765	.932
Probability	.615	.75	.742	.756
Punish_Amount	.811	.828	n/a	n/a
Location	.637	.687	.679	.732

[97] Pre-RA discussion this kappa was consistently low, and had a value of .514 at the end of all coding pre-discussion.

[98] Pre-RA discussion this kappa was consistently low, and had a value of .328 at the end of all coding pre-discussion.

SM 10.

Study 1 Correlations, ANOVAs, and Boxplots of Demographic Variables and Trait-Level Individual-Difference Measures

Study 1 Zero-Order Pearson Correlations

	Age	Imp.	NFCC	ASJS	NCE	Blame.
Age	1					
Impulsivity	-.27***	1				
NFCC	-.02	.26***	1			
ASJS	-.08	-.02	-.17***	1		
NCE	-.28***	.64***	.18***	-.12*	1	
Blameworthiness	-.01	.18***	.20***	-.12*	.14**	1

Study 1 One-Way ANOVAs for Demographic Categories on Individual Differences

	Imp.	NFCC	ASJS	NCE	Blame.
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Gender	3.85*	2.20	8.84***	8.56***	2.67[m]
Men	7.84 (5.03)	58.90 (11.22)	52.36 (10.31)	-60.20 (86.49)	112.83 (56.73)
Women	7.17 (5.19)	60.78 (10.58)	52.09 (10.91)	-87.42 (91.87)	125.65 (58.62)
Other	1.25 (.96)	52.75 (16.32)	74.5 (4.43)	-200 (0)	95 (78.46)
Race	4.49**	.27	2.07	3.17*	.86
White, Non-Hisp.	6.28 (4.95)	59.62 (11.01)	52.72 (11.81)	-92.69 (91.36)	110 (59.78)
White, Hispanic	8.19 (5.11)	59.96 (11.12)	51.63 (10.60)	-63.32 (88.29)	122.09 (56.85)
Black, Non-Hisp.	7.73 (4.96)	59.33 (9.97)	55.87 (10.86)	-64.24 (88.83)	119.56 (60.56)
Other	5.74 (5.25)	58.28 (12.15)	53.34 (8.90)	-94.17 (94.91)	116.93 (57.89)
Education	10.67***	.33	1.18	25.39***	1.04
High School	4.65 (4.91)	58.15 (11.98)	54.46 (9.21)	-139.35 (69.37)	125.38 (79.93)
Some College	4.93 (4.51)	58.95 (10.14)	54.17 (11.79)	-144.80 (67.33)	106.68 (75.57)
College Graduate	8.38 (4.99)	59.97 (11.09)	52.20 (10.54)	-52.64 (83.44)	120.56 (50.58)
Graduate School	7.60 (5.12)	60.03 (11.28)	51.15 (11.11)	-62 (96.64)	119.38 (55.03)

Note. "NFCC" stands for Need for Cognitive Closure; "ASJS" stands for adjusted System Justification Scale; "NCE" stands for Negative Contemplative Emotions. The top panel shows the Pearson correlations between Age, Impulsivity, Need for Cognitive Closure, adapted System Justification, Negative Contemplative Emotions, and Blameworthiness. The only individual difference measures not significantly correlated with each other were Impulsivity and adapted System Justification. Additionally, age was significantly, and

negatively, correlated with Impulsivity and Negative Contemplative Emotions, meaning that older participants had lower Impulsivity scores and had more negative emotions about trial than younger participants.

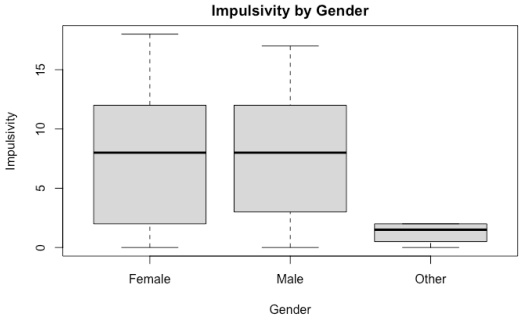
The lower panel shows the one-way ANOVAs conducted for Gender, Race, and Education on Age, Impulsivity, Need for Cognitive Closure, adapted System Justification, Negative Contemplative Emotions, and Blameworthiness. Of the three demographic variables, Gender most frequently showed statistically significant differences between its groups on the individual differences. To mention a few Gender differences, Men felt more positively toward trial, felt less blame, and had marginally lower Need for Cognitive Closure scores than Women. Additionally, of the individual difference measures, Impulsivity and Negative Contemplative Emotions were the only measures that differed significantly across all three demographic variables. Men, White-Hispanics, and individuals with at least a college degree had higher Impulsivity scores and less negative feelings toward trial than many of their respective reference categories. The rows of the table in the lower panel with variable names (e.g., Gender) have the F statistic, and the rows with variable-level names (e.g., Men) have the group mean and standard deviation. Follow-up *t*-tests revealed that Men and Women did not have significantly different Impulsivity scores ($t(369) = 1.28$, $p > .1$), but participants who selected the "Other" gender response option had significantly lower Impulsivity scores than Men and Women (respectively: $t(7) = 11.11$, $p < .001$; and $t(8) = -9.60$, $p < .001$). Follow-up t-tests revealed that all three categories differed on their Negative Contemplative Emotions. Men reported feeling significantly more positively toward trial than Women and participants who selected the "Other" gender response option

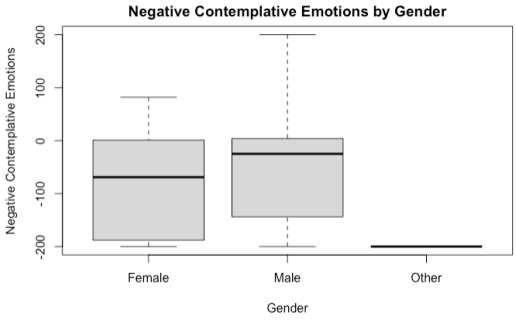
(respectively: $t(366) = 2.97$, $p < .01$; and $t(204) = 23.14$, $p < .001$), and Women reported feeling significantly more positively toward trial than did participants who selected the "Other" gender response option ($t(177) = -16.35$, $p < .001$). Follow-up t-tests revealed that Women blamed themselves more than Men ($t(369) = -2.17$, $p < .05$). Follow-up t-tests revealed that Women had marginally higher Need for Cognitive Closure than Men ($t(378) = -1.68$, $p = .09$). Follow-up t-tests revealed that Men and Women did not have significantly different adapted System Justification Scale scores ($t(366) = .25$, $p > .1$), but participants who selected the "Other" gender response option had significantly higher adapted System Justification Scale scores than Men and Women (respectively: $t(3) = -9.50$, $p < .01$; and $t(3) = 9.48$, $p < .001$).

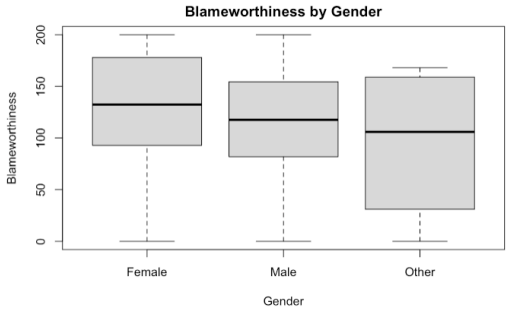
[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

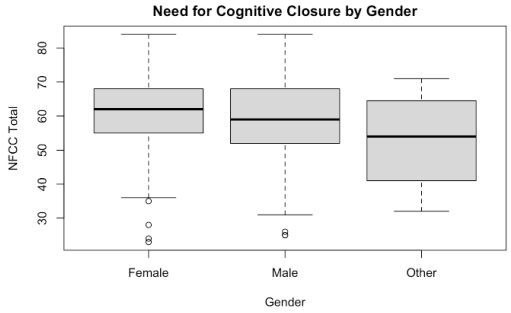
SM 10. (continued)

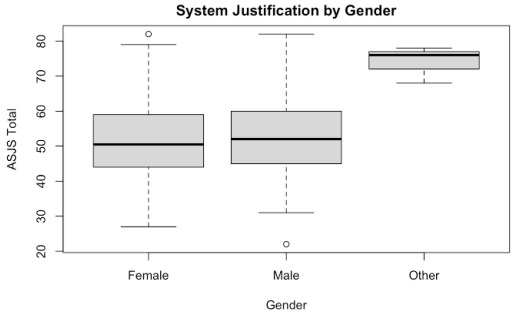
Study 1 Individual Differences by Gender Category





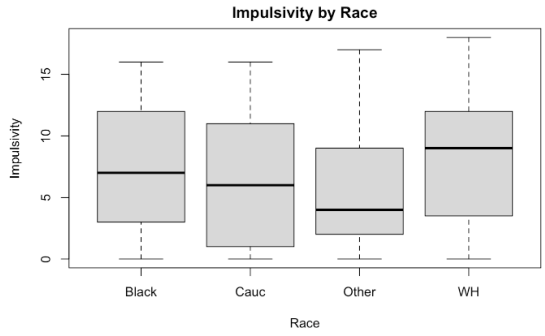


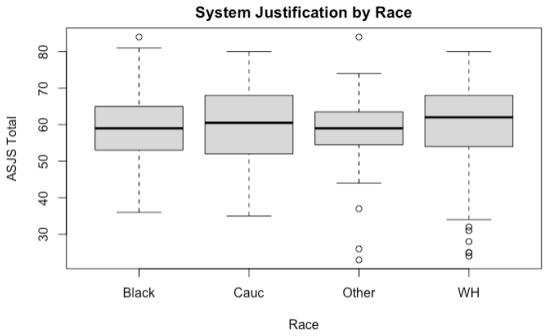


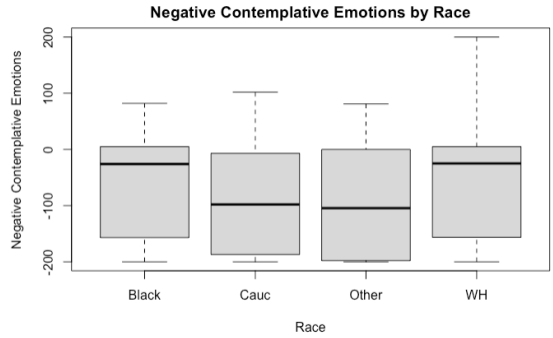


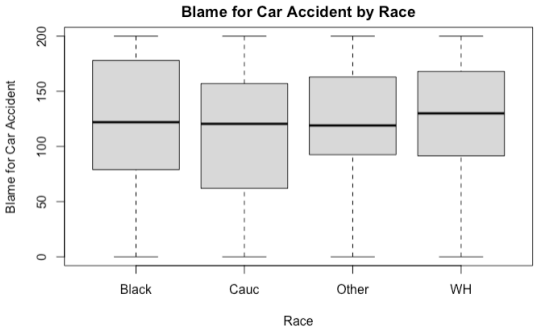
SM 10. (continued)

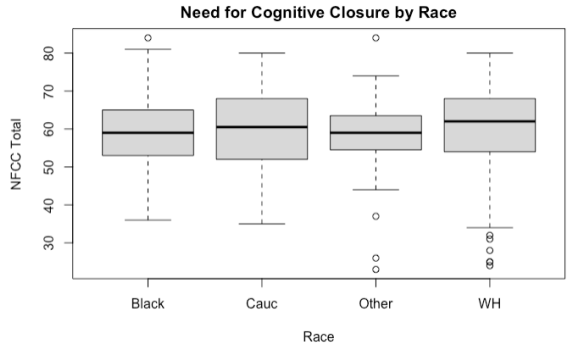
Study 1 Individual Differences by Race Category





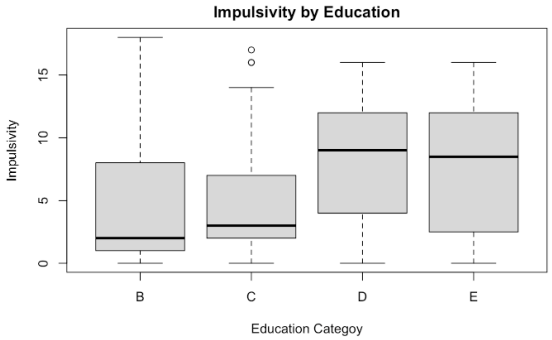


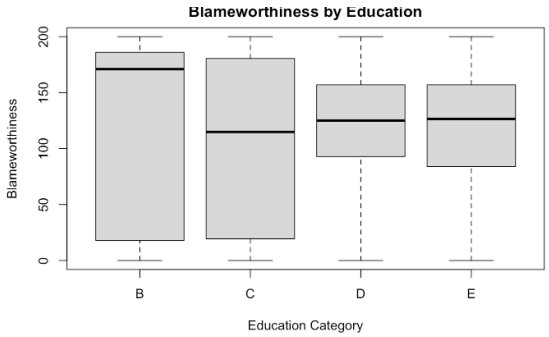


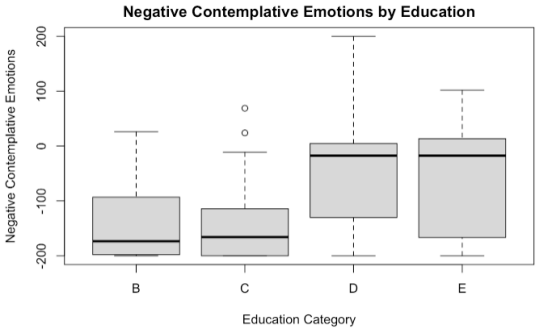


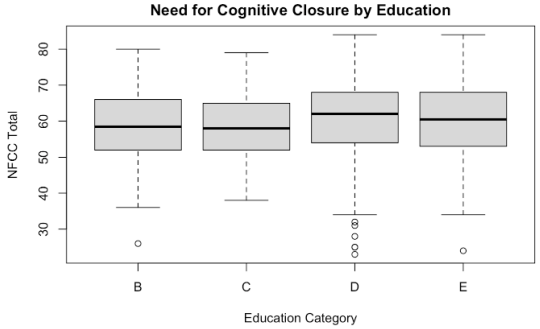
SM 10. (continued)

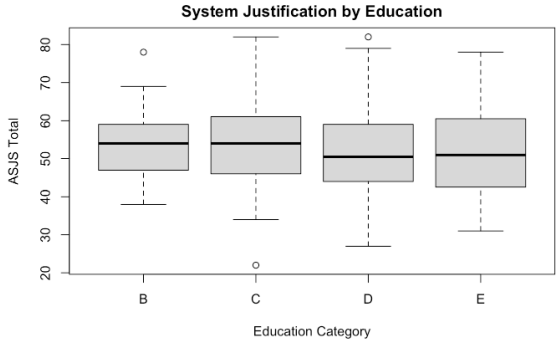
Study 1 Individual Differences by Education Category





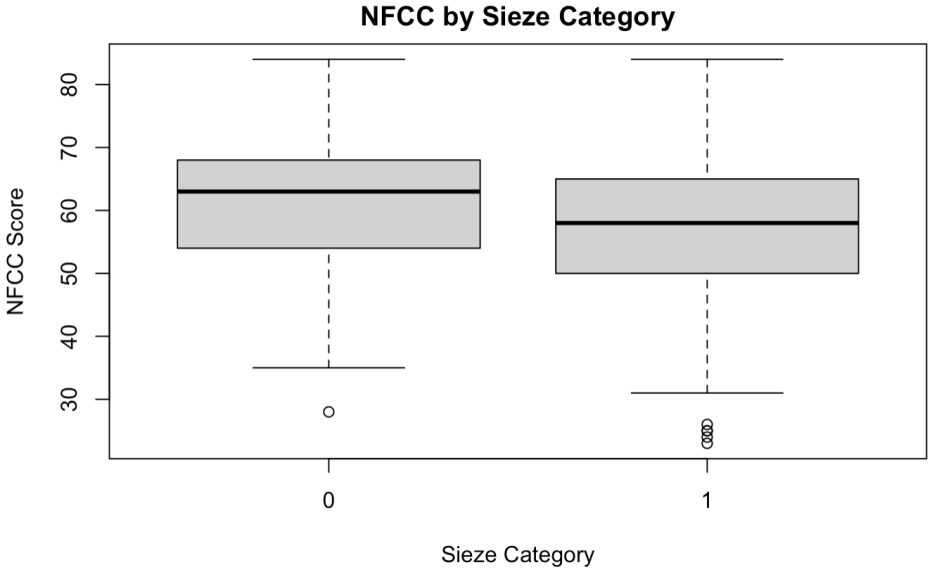


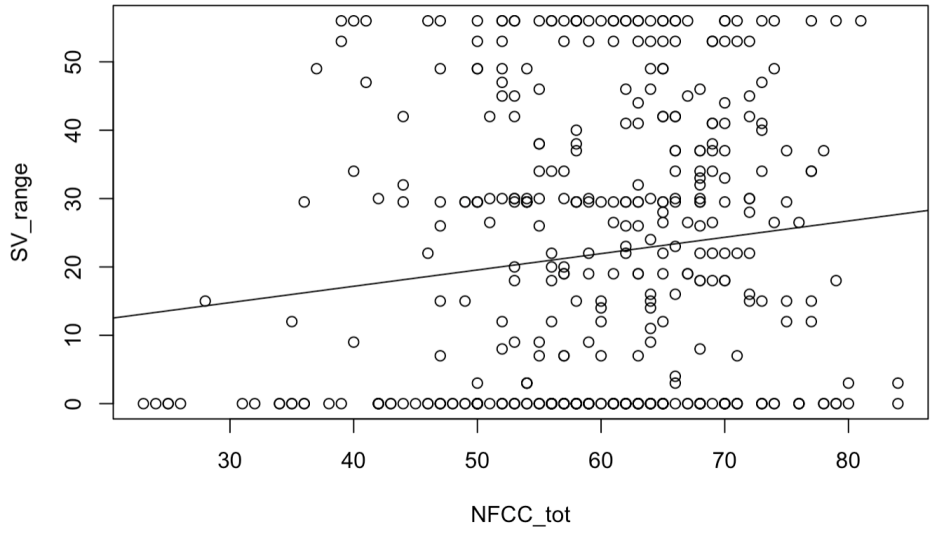




SM 11.

Study 1 NFCC Plots





SM 12.

Study 2 Qualitative Response Regressions

	Subjective Trial Aversion		
Models/Variables	*B*	*SE*	*95% CI*
STA ~ Delay	0.52	3.44	(-6.23, 7.27)
STA ~ Innocence A	-3.41	12.08	(-27.1, 20.3)
STA ~ Innocence B	4.35	14.77	(-24.6, 33.3)
STA ~ Probability			
Prob A	5.76	6.72	(-7.37, 18.88)
Prob AB	6.91	12.09	(-16.72, 30.54)
Prob B	-2.99	2.76	(-8.38, 2.39)
STA ~ Punishment			
Punishment A	2.90	20.92	(-37.78, 43.57)
Punishment AB	-7.67	8.63	(-24.45, 9.11)
Punishment AG	26.10	20.92	(-14.58, 66.77)
Punishment B	-0.91	2.91	(-6.27, 5.05)
Punishment BG	-13.37	12.13	(-36.95, 10.22)
Punishment G	1.54	5.56	(-9.27, 12.35)
STA ~ Location			
Location [Bail]	-12.23	14.74	(-41.1, 16.61)
Location [Jail]	-20.58	14.74	(-49.4, 8.26)

SM 13.

Study 1 Cross-Construct Multiple Regressions Model 2a

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	95% *CI*
Model 2a			0.17	0.69	
PTC	24.39***	4.13	.04		(16.37, 32.41)
DUT	0.11*	0.05	.001		(0.02, 0.20)
Ambiguous	-2.08	4.22			(-10.28, 6.12)
Jail	5.72	4.24	.002		(-2.53, 13.97)
Male	-2.95	1.84	.005		(-6.53, 0.64)
Other	4.52	9.05			(-13.05, 22.10)
Education_binary	-9.04***	2.20	.03		(-13.21, -4.77)
PTC:Delay	-0.11	0.06	.001		(-0.23, 0.02)
PTC:Ambiguous	0.93	5.90			(-10.54, 12.40)
PTC:Jail	-7.71	5.92	.002		(-19.22, 3.76)
DUT:Ambiguous	-0.03	0.07			(-0.16, 0.10)
DUT:Jail	0.28***	0.07	.003		(0.15, 0.41)
PTC:DUT:Ambiguous	0.04	0.09			(-0.15, 0.22)
PTC:DUT:Jail	-0.33***	0.09	.002		-(0.51, -0.15)

SM 14.

Study 1 Cross-Construct Multiple Regressions Model 3a

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Model 3			.07	.43	
PTC	7.35	6.75	.06		(-5.36, 20.06)
DUT	0.02	0.11			(-0.19, 0.24)
Location [Ambiguous]	-4.69	6.72	.002		(-17.34, 7.97)
Location [Jail]	6.23	8.78	.002		(-10.30, 22.75)
Education [Binary]	-14.42*	6.58	.03		(-26.77, -2.07)
PTC:DUT	-0.07	0.15			(-0.37, 0.23)
PTC:Ambiguous	3.60	9.52	.001		(-14.33, 21.52)
PTC:Jail	-4.01	11.02	.001		(-24.75, 16.73)
DUT:Ambiguous	0.09	0.15	.001		(-0.21, 0.39)
DUT:Jail	0.05	0.20			(-0.34, 0.44)
PTC:DUT:Ambiguous	-0.05	0.22			(-0.47, 0.37)
PTC:DUT:Jail	-0.06	0.25			(-0.56, 0.43)
Accident_3mYes	-1.77	2.95	.003		(-7.31, 3.76)

[m].05 ≤ *p* ≤ .1. *p < .05. **p < .01. ***p < .001

SM 15.

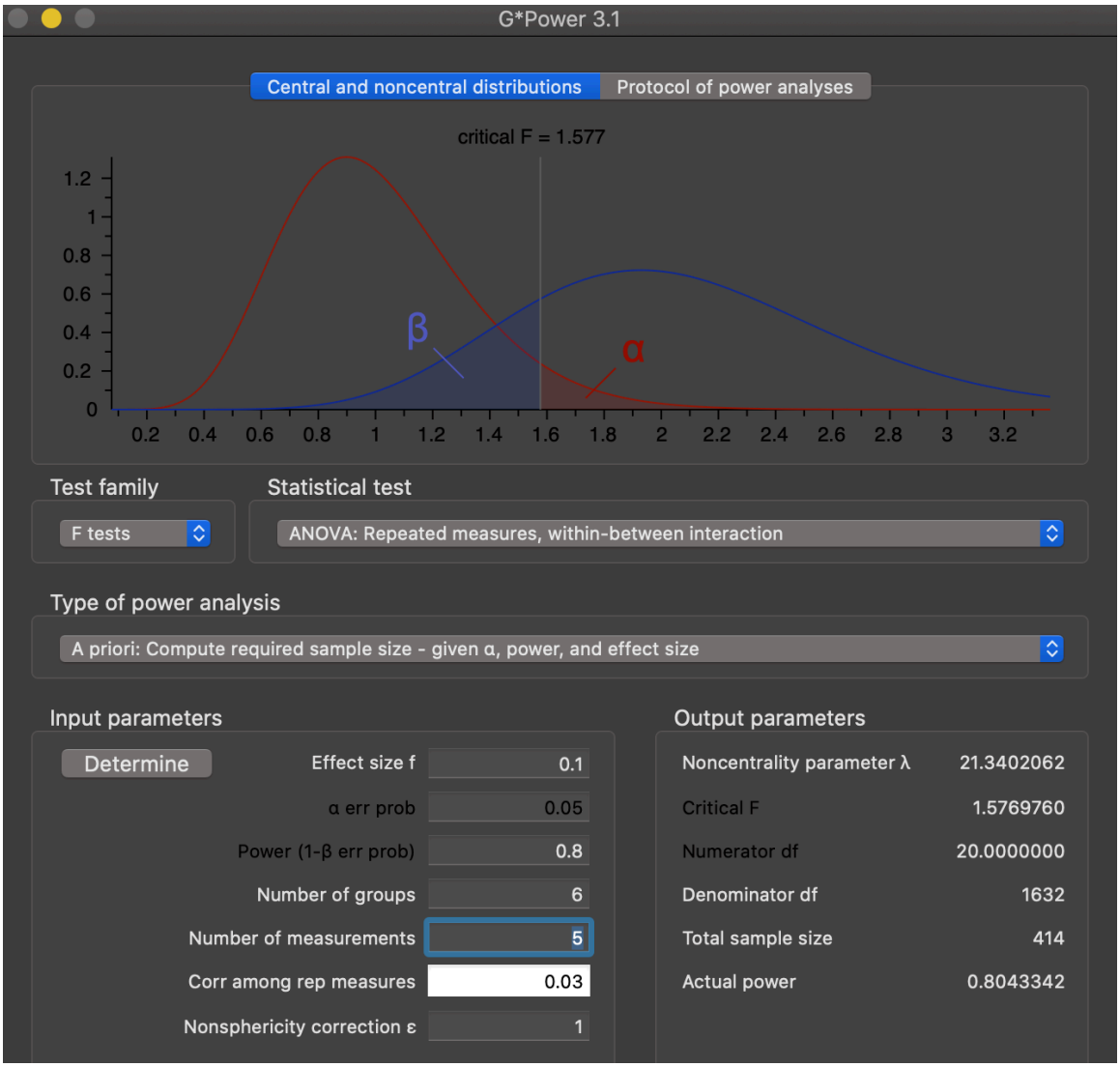
Study 2 Subjective Trial Aversion Example Slider

What is the **absolute longest length of time** you would agree (through a plea deal) to go to jail for when faced with the trial option presented below?

Trial Option = 240 days (8 months) uncertain and delayed
Plea slider: [0 days, 120 days]

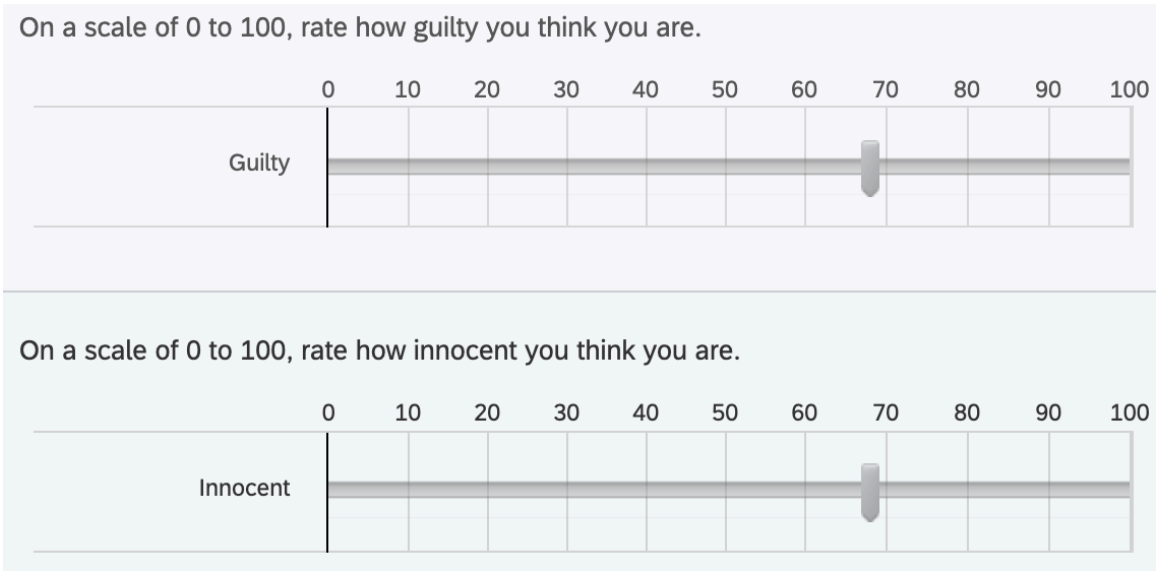
SM 16.

Study 2 G*Power Screenshot



SM 17.

Studies 2–4 Continuous Perceptions of Innocence and Guilt



SM 18.

Studies 2–4 Personal Involvement Questions

To what extent were you [engaged with/attentive to/interested in/involved in] the legal decision(s) you mad?
Response scale 1-5 (1=not at all, 5=extremely)

Do you own a cell phone? (Y/N)

Response scale 1-7 (1=never, 7=all the time)
How often do you look at your phone while driving without picking it up?
How often do you look at your phone while driving by picking it up?
How often do you use voice-activation while driving to send a text message?
How often do you use your hands/fingers to text, change music, check driving directions while driving?

SM 19.

Studies 2–4 Criminal Justice Experience Follow-Up Questions

- Have you, or anyone you're close with, been criminally charged?
    - I've been criminally charged
    - At least one person I'm close with has been criminally charged
    - Neither
    - I've been criminally charged and at least one person I'm close with has been criminally charged
- [DISPLAY/SKIP LOGIC: If not "Neither"]
    - Have you, [or anyone you're close with,] been offered a plea bargain?
        - Yes
        - No
        - I don't know
    - What did you [person you're close with] decide?
        - Trial
        - Plea
        - I don't know

SM 20.

Studies 2–3 Perceived Stress Scale (Cohen et al., 1983)

0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often					
1. In the last month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
2. In the last month, how often have you felt that you were unable to control the important things in your life?	0	1	2	3	4
3. In the last month, how often have you felt nervous and "stressed"?	0	1	2	3	4
4. In the last month, how often have you felt confident about your ability to handle your personal problems?	0	1	2	3	4
5. In the last month, how often have you felt that things were going your way?	0	1	2	3	4
6. In the last month, how often have you found that you could not cope with all the things that you had to do?	0	1	2	3	4
7. In the last month, how often have you been able to control irritations in your life?	0	1	2	3	4
8. In the last month, how often have you felt that you were on top of things?	0	1	2	3	4
9. In the last month, how often have you been angered because of things that were outside of your control?	0	1	2	3	4
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

SM 21.

Study 2 Correlations, ANOVAs, and Boxplots of Demographic Variables and Trait-Level Individual-Difference Measures

Study 2 Zero-Order Pearson Correlations

	Age	Imp.	NFCC	ASJS	NCE	Blame.	Innoc.	Guilt	PSS
Age	1								
Imp.	-0.35***	1							
NFCC	0.15***	0.06	1						
ASJS	0.03	-0.01	0.01	1					
NCE	-0.44***	0.40***	-0.09[m]	0.09[m]	1				
Blame.	-0.08	0.12*	0.18***	-0.00	-0.05	1			
Innoc.	-0.06	0.11*	0.02	-0.06	0.15	-0.49***	1		
Guilt	-0.07	0.10*	0.01*	0.10*	0.05	0.67***	-0.66***	1	
PSS	-0.02	-0.00	-0.02	0.05	-0.00	-0.04	0.04	-0.00	1

Study 2 One-Way ANOVAs for Demographic Categories on Individual Differences

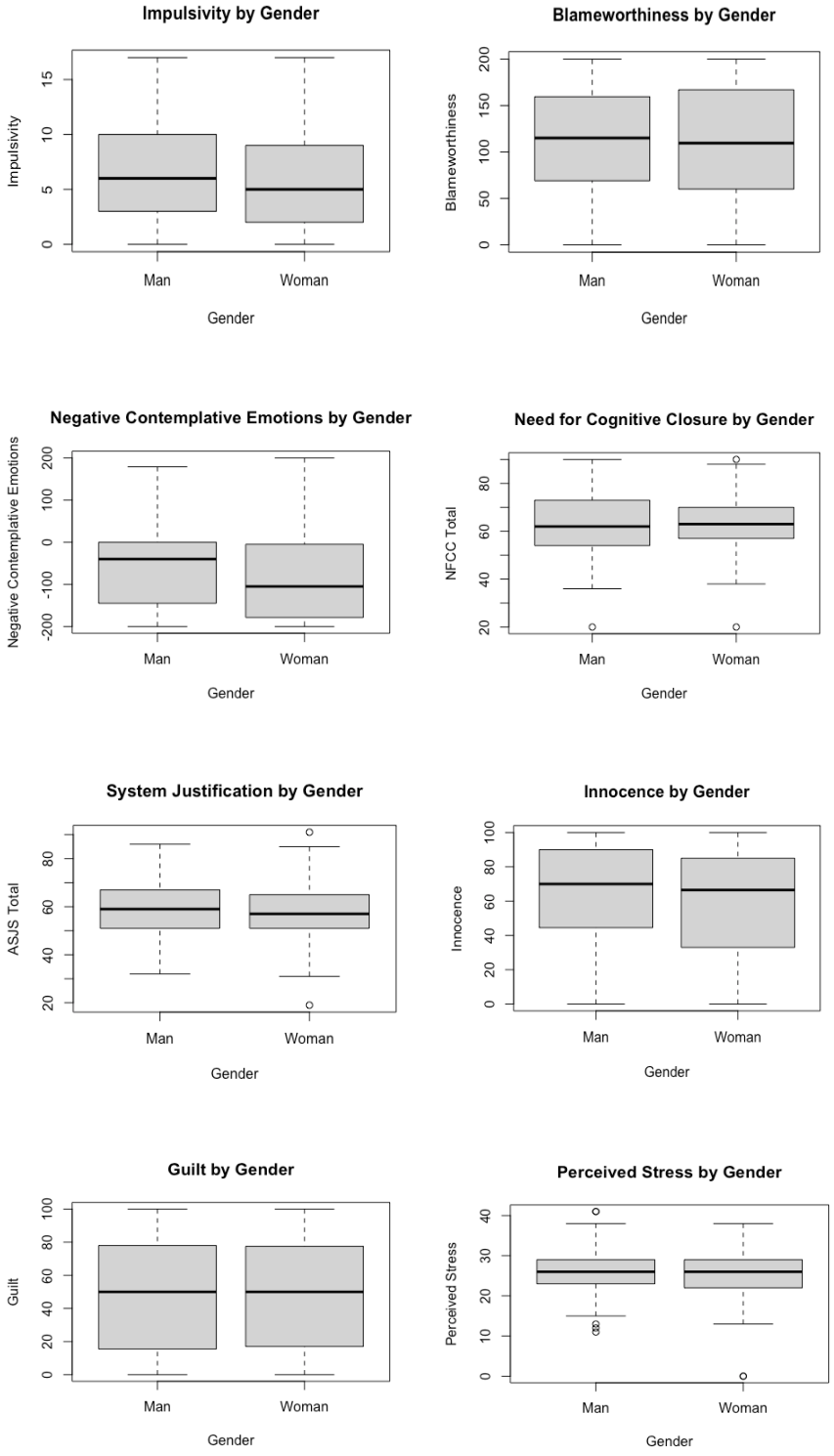
	Imp.	NFCC	ASJS	NCE	Blame.	Innoc.	Guilt	PSS
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Gender	4.42*	0.00	1.49	8.66**	0.04	3.17^{m}	0.02	0.23
Men	6.81 (4.76)	63.27 (12.18)	58.66 (11.03)	-65.86 (86.68)	109.84 (61.33)	63.47 (31.50)	48.49 (34.20)	25.97 (5.23)
Women	5.84 (4.58)	63.23 (10.87)	57.33 (11.27)	-91.35 (89.73)	111.06 (64.11)	57.84 (32.82)	47.61 (33.99)	25.71(5.79)
Race	1.23	0.48	3.04	0.73	0.77	0.01	0.03	0.18
White	6.10 (4.83)	63.56 (11.58)	58.89 (11.20)	-80.01 (92.69)	110.88 (64.01)	60.77 (32.35)	48.32 (34.37)	25.91 (5.65)
Black	7.14 (4.49)	61.95 (12.87)	56.63 (11.97)	-66.58 (81.20)	117.08 (56.66)	60.10 (32.53)	47.44 (32.22)	25.92 (5.27)
Other	6.47 (4.24)	63.11 (10.16)	55.64 (9.99)	-84.33 (80.93)	103.68 (62.68)	60.33 (32.15)	47.49 (34.71)	25.49 (5.27)
Education	2.19^{m}	1.45	1	9.19***	0.22	0.34	1.77	0.68
High School	6.91 (4.88)	63.77 (11.34)	57.56 (12.04)	-89.65 (79.10)	111.13 (66.81)	58.52 (35.74)	47.55 (36.20)	25.32 (4.71)
Some College	5.52 (4.47)	64.48 (9.75)	56.51 (10.68)	-114.78 (80.32)	107.18 (64.98)	58.66 (33.28)	40.73 (34.42)	26.09 (6.80)
College Graduate	5.95 (4.76)	63.64 (11.94)	58.07 (10.96)	-74.52 (85.84)	113.28 (61.02)	61.72 (31.02)	49.32 (33.01)	25.66 (5.81)
Graduate School	6.97 (4.47)	61.21 (12.17)	59.36 (11.01)	-48.05 (97.83)	108.13 (60.36)	62.22 (30.33)	52.23 (32.97)	26.37 (4.57)

Note. "Imp." stands for Impulsivity; "NFCC" stands for Need for Cognitive Closure; "ASJS" stands for adjusted System Justification Scale; "NCE" stands for Negative Contemplative Emotions; "Blame." stands for Blameworthiness; "Innoc." stands for Perceptions of Innocence; "Guilt" stands for Perceptions of Guilt; and "PSS" stands for Perceived Stress Scale. The top table shows the Pearson correlations between Age, Impulsivity, Need for Cognitive Closure, adapted System Justification, Negative Contemplative Emotions, Blameworthiness, Perceptions of Innocence, Perceptions of Guilty, and the Perceived Stress Scale. None of the trait-level individual-difference measures (i.e., PSS, aSJS, NFCC, Impulsivity) were significantly correlated with each other. Age, on the other hand, was significantly related with both individual difference measures and NCE, a situated-person variable. Specifically, Age was significantly, and positively related with NFCC, suggesting that older participants had higher need for closure than younger

participants. Additionally, age was significantly, and negatively, correlated with Impulsivity and Negative Contemplative Emotions, meaning that older participants had lower Impulsivity scores and had more negative emotions about trial than younger participants. The bottom table shows the one-way ANOVAs conducted for Gender, Race, and Education on Age, Impulsivity, Need for Cognitive Closure, adapted System Justification, Negative Contemplative Emotions, Blameworthiness, Perceptions of Innocence, Perceptions of Guilty, and the Perceived Stress Scale. Of the three demographic variables, Gender most frequently showed statistically significant differences between its groups on the individual differences. To mention a few Gender differences, Men felt more positively toward trial, had higher Impulsivity, and had marginally higher Perceptions of Innocence than Women. Race categories did not differ on any of the individual differences. Education categories differed significantly on Negative Contemplative Emotions such that participants in the part-of-college group had the most negative feelings about trial and participants in the graduate-school group had the least negative feelings about trial.

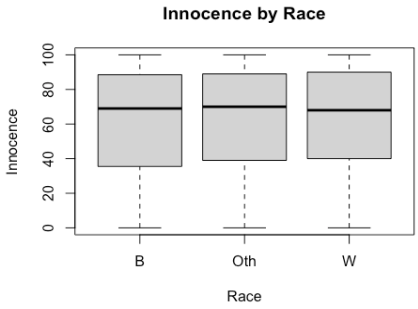
SM 21. (continued)

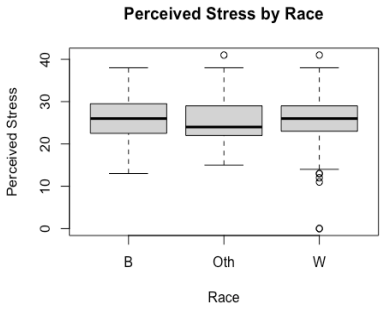
Study 2 Individual Differences by Gender Category

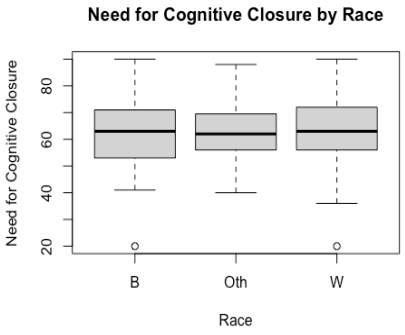


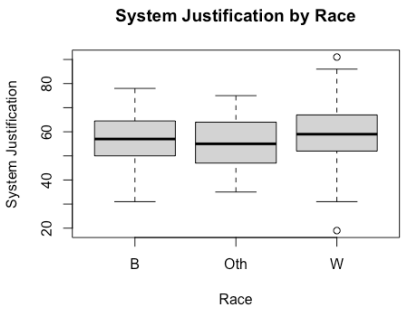
SM 21. (continued)

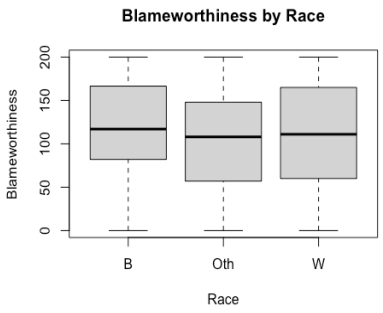
Study 2 Individual Differences by Race Category

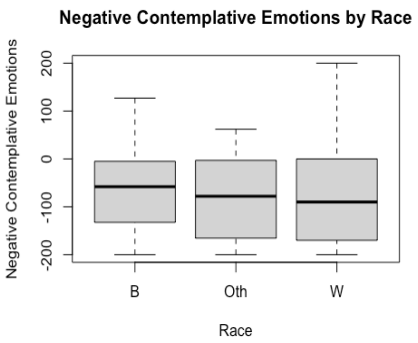


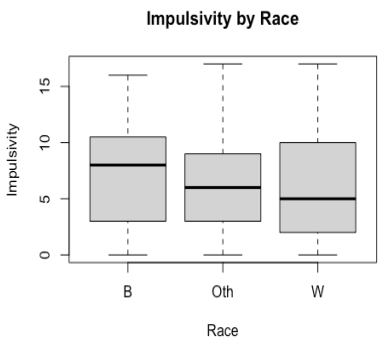






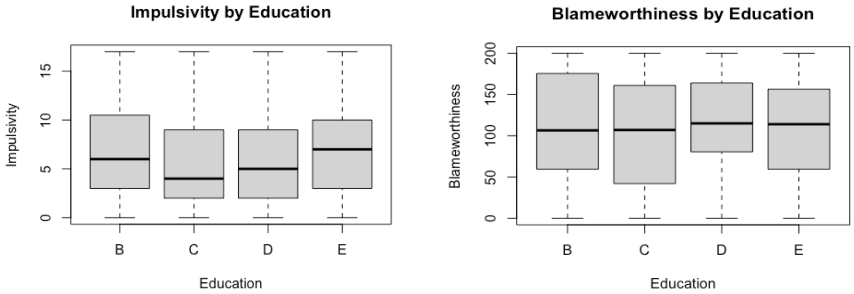


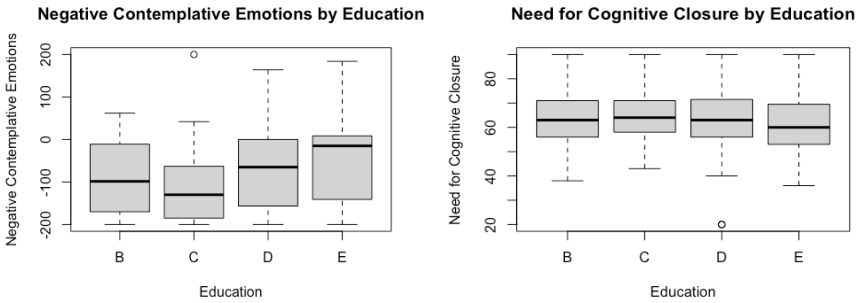


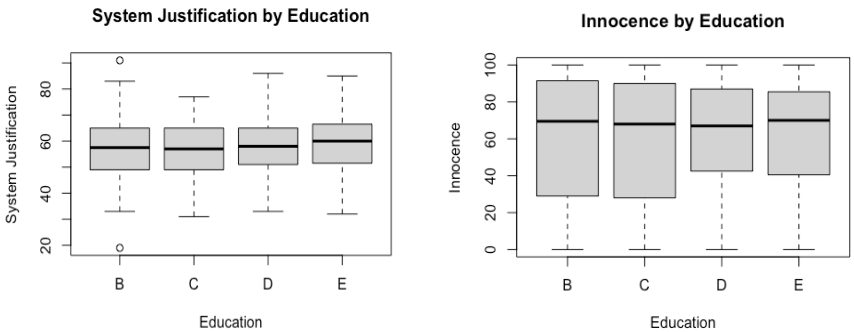


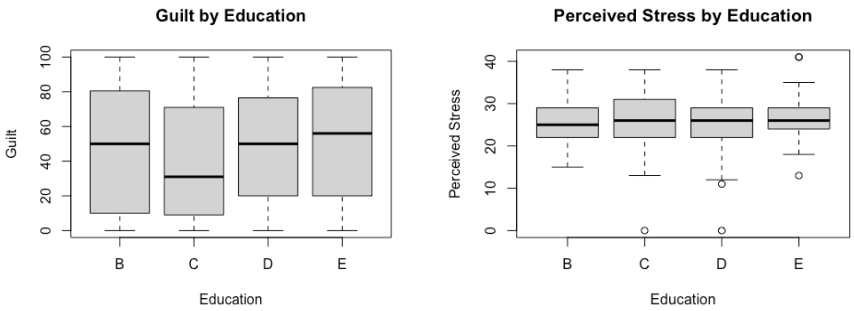
SM 21. (continued)

Study 2 Individual Differences by Education Category



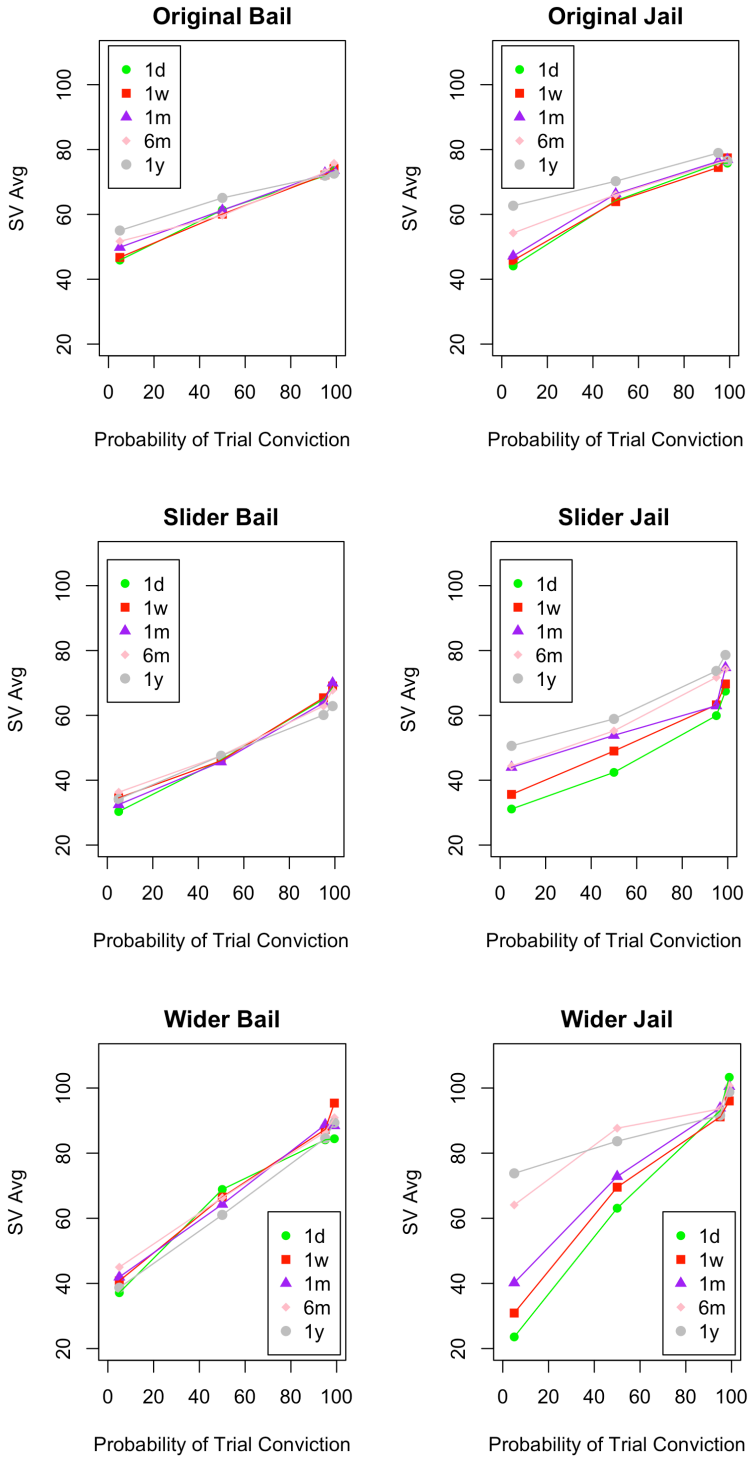






SM 22.

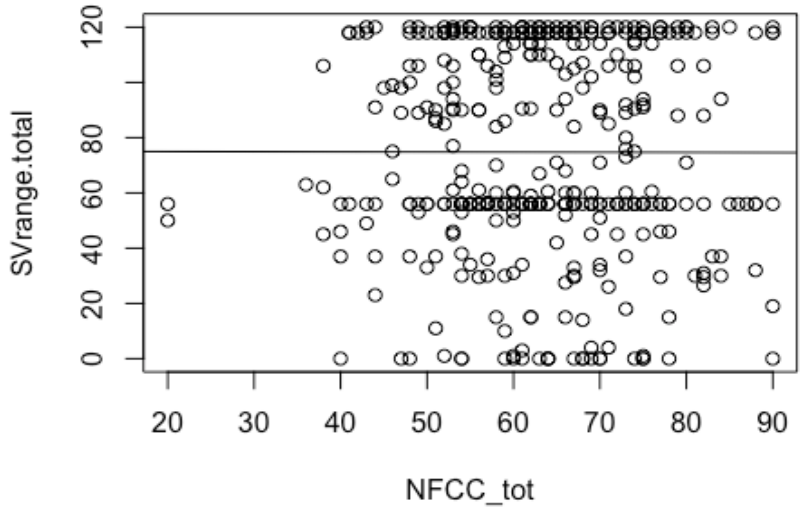
Study 2 Three-Way Interactions by Measurement Method Condition with PTC on X-Axis



Note. All three conditions (Wider, Original, and Slider) contain more spread between the Delay levels (different colored lines) in the Jail condition relative to the Bail condition. Additionally, the Wider Jail graph in the lower right has the most pronounced Delay*Probability interaction relative to the other two Jail graphs (mid- and upper-right).

SM 23.

Study 2 NFCC's Effect on Subjective Trial Aversion Scores' Range



SM 24.

Study 2 Within Decision Tree (Probability*Delay) Plea-Trial Decision Distributions

Original	Flip Placement: Decision Tree #1			
	First	Second	Third	Never Flip
	29	22	10	82

Original	First Placement: Decision Tree #2			
	First	Second	Third	Never Flip
	31	15	9	88

Original	First Placement: Decision Tree #3			
	First	Second	Third	Never Flip
	22	10	5	106

Original	First Placement: Decision Tree #4			
	First	Second	Third	Never Flip
	26	6	2	109

Original	First Placement: Decision Tree #5			
	First	Second	Third	Never Flip
	26	9	11	97

Original	First Placement: Decision Tree #6			
	First	Second	Third	Never Flip
	38	12	5	88

Wider	First Placement: Decision Tree #1				
	First	Second	Third	Fourth	Never Flip
	31	28	13	11	47

Wider	First Placement: Decision Tree# 2				
	First	Second	Third	Fourth	Never Flip
	35	19	10	10	56

Wider	First Placement: Decision Tree #3				
	First	Second	Third	Fourth	Never Flip
	21	9	6	3	91

Wider	First Placement: Decision Tree #4				
	First	Second	Third	Fourth	Never Flip
	12	7	2	5	104

Wider	First Placement: Decision Tree #5				
	First	Second	Third	Fourth	Never Flip
	27	10	17	8	68

Wider	First Placement: Decision Tree #6				
	First	Second	Third	Fourth	Never Flip
	23	19	8	1	79

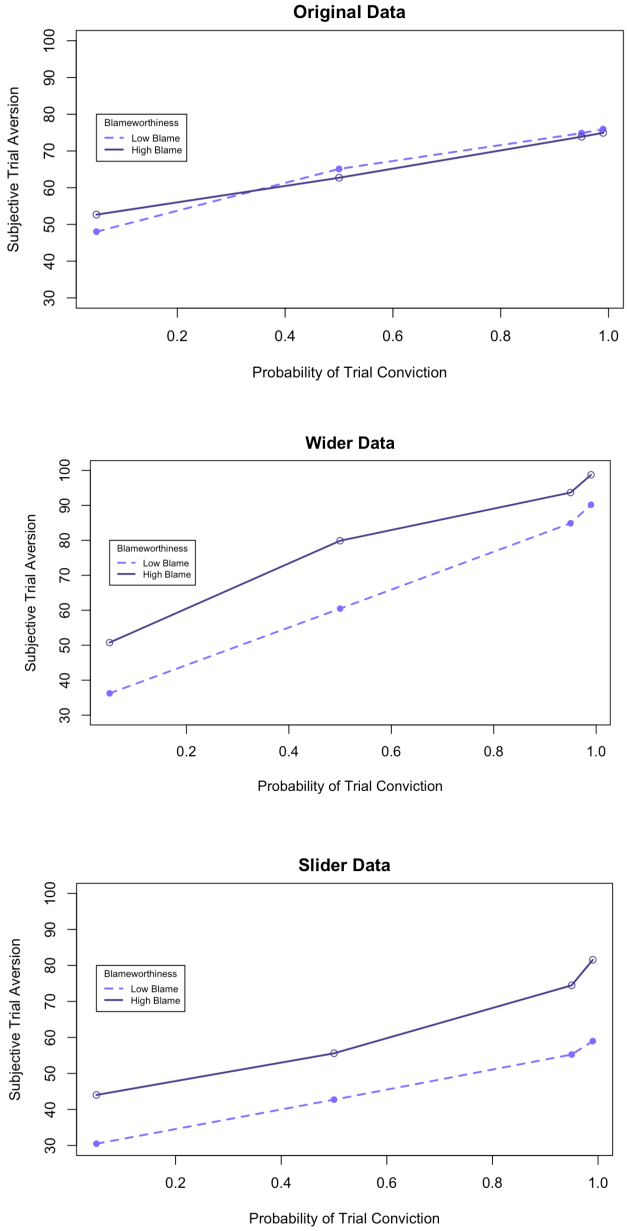
SM 25.

Three Measurement-Method Follow-Up Regressions

	Subjective Trial Aversion											
	Original Titration				*Wider Titration*				*Slider Titration*			
Models/Variables	B_o	SE_o	R^2_m	*95% CI*	B_w	SE_w	R^2_m	*95% CI*	B_s	SE_s	R^2_m	*95% CI*
Blame*PTC			.18				.20				.18	
PTC	0.30***	0.02	.07	(.26, .33)	0.58***	0.04	.06	(.51, .66)	0.20***	0.03	.01	(.15, .26)
Blame	0.05*	0.21	.005	(.008, .009)	0.19***	0.04.	.02	(.10, .28)	0.11**	0.04	.01	(.03, .19)
PTC:Blame	-.0003*	0.0001	.001	(-.0006, -.00001)	-.0005[m]	0.0003	.001	(-.001, .00003)	.001***	.0002	.007	(.0009, .002)
Imp*PTC			.19				.24				.15	
Imp	1.18***	0.28	.02	(.64, 1.72)	-0.75	0.55	.002	-1.84, .33	2.90***	0.56	.05	(1.83, 4.01)
PTC	0.38***	0.01	.14	(.35, .40)	0.71***	0.03	.14	.66, .77	0.42***	0.02	.08	(.37, .46)
Imp:PTC	-0.02***	0.001	.02	(-.02, -.01)	-0.03***	0.00	.02	-.04, -.02	-0.01***	0.00	.004	(-.02, -.01)
Innoc._Ordin*PTC			.18				.22				.11	
PTC	0.27***	0.01	.11	(.24, .29)	0.54***	0.03	.08	(.48, .59)	0.43***	0.02	.07	(.39, .47)
Innoc.	-0.12	0.02	.004	(-4.66, 2.26)	-15.76***	3.91	.02	(-23.42, -8.11)	-0.34	3.41	.005	(-7.02, 6.34)
PTC:Innoc.	.0001	0.01	.002	(-.02, .02)	-0.02	0.03		(-.02, -.07)	-0.09***	0.02		(-.12, -.05)

SM 26.

Study 2 Blameworthiness * Probability of Trial Conviction by Measurement Method



Note. The Original condition's significant and negative interaction (SM 25) replicates Study 1's finding, and Figure 5 relative to the top panel, here, shows somewhat similar patterns with the High Blame line starting above the Low Blame line at lower Probabilities, then going below the Low Blame line at higher Probabilities. This figure also shows that in the Slider (middle panel) and Wider (bottom panel) conditions

Blameworthiness had a stronger main effect such that High Blame was associated with higher Subjective Trial Aversion scores than Low Blame; additionally, the significant interaction in the Slider condition (SM 25) and marginally significant interaction in the Wider condition (SM 25) can be seen in the High Blame lines' various slopes relative to the nearly straight Low Blame lines.

SM 27.

Study 2's Joint Distribution of Two Types of Criminal Experience

Other Criminal Experience	Own Criminal Experience	
	No	Yes
No	237 (57.11%)	42 (10.12%)
Yes	71 (17.11%)	65 (15.66%)

SM 28.

Study 2 Cross-Construct Multiple Regression Model 1

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
PTC*DUT*WTL*Meas. Meth.			0.18	
PTC	0.28***	0.02	0.009	(0.24, 0.33)
DUT	0.17*	0.07		(0.03, 0.30)
Jail	-0.81	4.88		(-10.3, 8.72)
Slider	-16.34***	4.90	0.003	(-25.9, -6.77)
Wider	-6.65	4.95		(-16.3, 3.01
PTC:DUT	-0.002[m]	0.001		(-.004, 0.000008)
PTC:Jail	-0.04	0.03		(-0.02, 0.11)
DUT:Jail	0.16[m]	0.10		(-0.02, 0.35)
PTC:Slider	0.10**	0.03	0.001	(0.03, 0.17)
PTC:Wider	0.23***	0.03	0.003	(0.16, 0.29)
DUT:Slider	-0.09	0.10		(-0.28, 0.10)
DUT:Wider	-0.20*	0.10		(-0.39, -0.01)
Jail:Slider	4.79	6.92		(-8.71, 18.3)
Jail:Wider	-7.99	7.09		(-21.8, -0.001)
PTC:DUT:Jail	-0.001	0.001		(-0.003, 0.003)
PTC:DUT:Slider	0.0001	0.001		(-0.0007, 0.004)
PTC:DUT:Wider	0.002	0.01		(0.05, 0.24)
PTC:Jail:Slider	-0.09[m]	.05		(-0.19, 0.001)
PTC:Jail:Wilder	0.15**	0.05	0.001	(0.05, 0.24)
DUT:Jail:Slider	0.04	0.14		(-0.22, 0.31)
DUT:Jail:Wider	0.79***	0.14	0.002	(0.52, 1.06)
PTC:DUT:Jail:Slider	0.002	0.002		(-0.001, 0.006)
PTC:DUT:Jail:Wider	-0.008***	0.002	0.001	(-0.01, -0.005)

SM 29.

Study 2 Cross-Construct Multiple Regression Model 3

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
PTC*DUT*WTL*Meas. Meth.			0.19	0.57	
PTC	0.28***	0.02	0.009		(0.24, 0.33)
DUT	0.17*	0.07			(0.03, 0.30)
Jail	-0.81	4.88			(-10.9, 8.12)
Slider	-16.34***	4.90	0.003		(-27.0, -7.84)
Wider	-6.65	4.95	0.001		(-17.1, 2.26)
PTC:DUT	-0.002[m]	0.001			(0.004, 0.000008)
PTC:Jail	-0.04	0.03			(-0.02, 0.11)
DUT:Jail	0.16[m]	0.10			(-0.02, 0.35)
PTC:Slider	0.10**	0.03	0.001		(0.03, 0.17)
PTC:Wider	0.23***	0.03	0.003		(0.16, 0.10)
DUT:Slider	-0.09	0.10			(-0.28, 0.10)
DUT:Wider	-0.20*	0.10			(-0.39, -0.01)
Jail:Slider	4.79	6.92			(-6.95, 20.1)
Jail:Wider	-7.99	7.09			(-20.9, 6.73)
PTC:DUT:Jail	-0.001	0.001			(-0.004, 0.001)
PTC:DUT:Slider	0.0001	0.001			(-0.003, 0.003)
PTC:DUT:Wider	0.002	0.01			(-0.0007, 0.004)
PTC:Jail:Slider	-0.09[m]	.05			(-0.19, 0.001)
PTC:Jail:Wilder	0.15**	0.05	0.001		(0.05, 0.24)
DUT:Jail:Slider	0.04	0.14			(-0.22, 0.31)
DUT:Jail:Wider	0.79***	0.14	0.002		(0.52, 1.06)
PTC:DUT:Jail:Slider	0.002	0.002			(-0.001, 0.006)
PTC:DUT:Jail:Wider	-0.008***	0.002	0.001		(-0.01, -0.005)
Gender	5.67*	2.68	0.005		(0.45, 10.9)
Personal Involvement	0.25	0.35	0.001		(-0.43, 0.94)
Behavioral Perss Involv.	-0.001	0.19			(-0.37, 0.37)

SM 30.

Study 2 Cross-Construct Multiple Regression Model 4

			Subjective Trial Aversion		
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
PTC*DUT*WTL*Meas. Meth.			0.19	0.57	
PTC	0.28***	0.02	0.009		(0.24, 0.03)
DUT	0.17*	0.07			(0.03, 0.30)
Jail	-0.81	4.88			(-11.2, 7.82)
Slider	-16.34***	4.90	0.003		(-27.2, -8.12)
Wider	-6.65	4.95	0.001		(-17.7, 166)
PTC:DUT	-0.002[m]	0.001			(-0.004, 0.008)
PTC:Jail	-0.04	0.03			(-0.02, 0.11)
DUT:Jail	0.16[m]	0.10			(-0.02, 0.35)
PTC:Slider	0.10**	0.03	0.001		(0.03, 0.17)
PTC:Wider	0.23***	0.03	0.003		(0.16, 0.29)
DUT:Slider	-0.09	0.10			(-0.28, 0.12)
DUT:Wider	-0.20*	0.10			(-0.39, -0.01)
Jail:Slider	4.79	6.92			(-6.79, 20.2)
Jail:Wider	-7.99	7.09			(-20.6, 7.02)
PTC:DUT:Jail	-0.001	0.001			(-0.004, 0.001)
PTC:DUT:Slider	0.0001	0.001			(-0.003, 0.003)
PTC:DUT:Wider	0.002	0.01			(-0.0007, 0.004)
PTC:Jail:Slider	-0.09[m]	.05			(-0.19, 0.001)
PTC:Jail:Wilder	0.15**	0.05	0.001		(0.05, 0.24)
DUT:Jail:Slider	0.04	0.14			(-0.22, 0.31)
DUT:Jail:Wider	0.79***	0.14	0.002		(0.52, 1.06)
PTC:DUT:Jail:Slider	0.002	0.002			(-0.001, 0.006)
PTC:DUT:Jail:Wider	-0.008***	0.002	0.001		(-0.01, 0.005)
Gender	5.42*	2.58	0.005		(0.42, 10.4)
NFCC	0.18	0.11	0.003		(-0.04, 0.39)
Impulsivity	-0.11	0.27			(-0.65, 0.42)

SM 31.

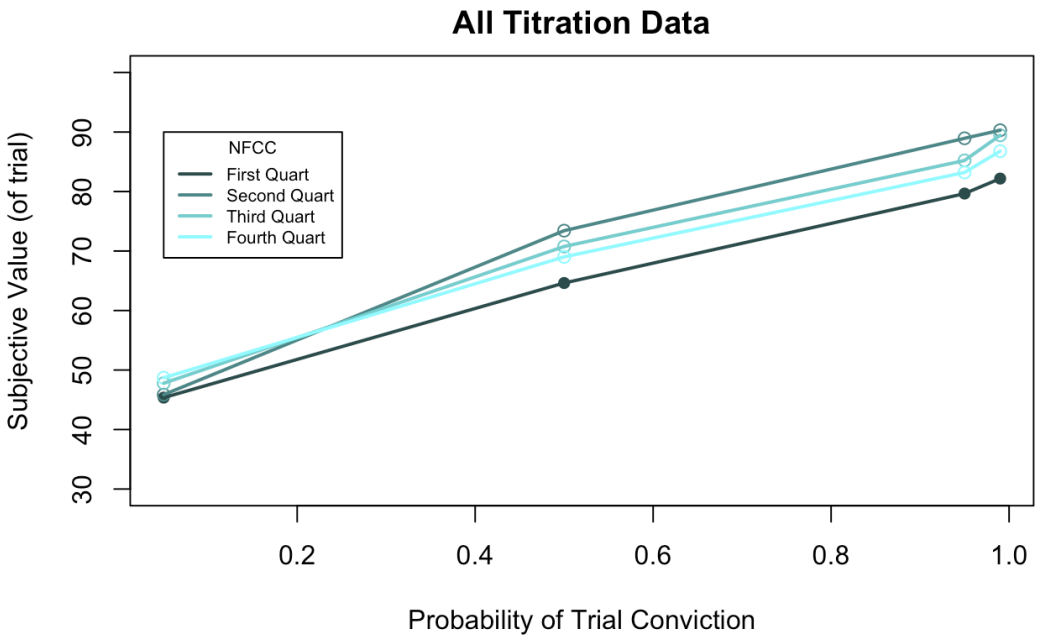
Study 2 Three-Way Interaction of Non-Methodological Experimental Variables

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
PTC	0.37***	0.01	.12	(.35, .39)
DUT	0.10***	0.02	.002	(.07, .14)
WTL	5.06[m]	2.64	.004	(-.12, 10.2)
PTC*DUT			.13	
PTC	0.41***	0.01	.1	(.39, .43)
DUT	2.75***	0.29	.006	(2.19, 3.31)
PTC:DUT	-0.03***	0.004	.003	(-.04, -.02)
PTC*WTL			.13	
PTC	0.37***	0.01	.07	(.35, .40)
Jail	5.59*	2.82	.002	(.06, 11.11)
PTC:Jail	-0.01	0.02		(-.04, .02)
DUT*WTL			.01	
DUT	-0.06	0.24		(-.53, .41)
Jail	1.44	2.70		(-3.85, 6.73)
DUT:Jail	2.23***	0.34	.003	(1.57, 2.90)
DUT*WTL*PTC			.13	
DUT	0.69[m]	0.40		(-.10, 1.47)
Jail	-1.24	2.97		(-7.05, 4.57)
PTC	0.39***	0.01	.05	(.37, .42)
DUT:Jail	4.21***	0.57	.003	(3.09, 5.33)
DUT:PTC	-0.01*	0.01		(-.02, -.001)
Jail:PTC	0.04*	0.02		(.004, .08)
DUT:Jail:PTC	-0.03***	0.01	.001	(-.05, -.02)

Note. The simple linear regression STA ~ STL had a p-value of .056.

SM 32.

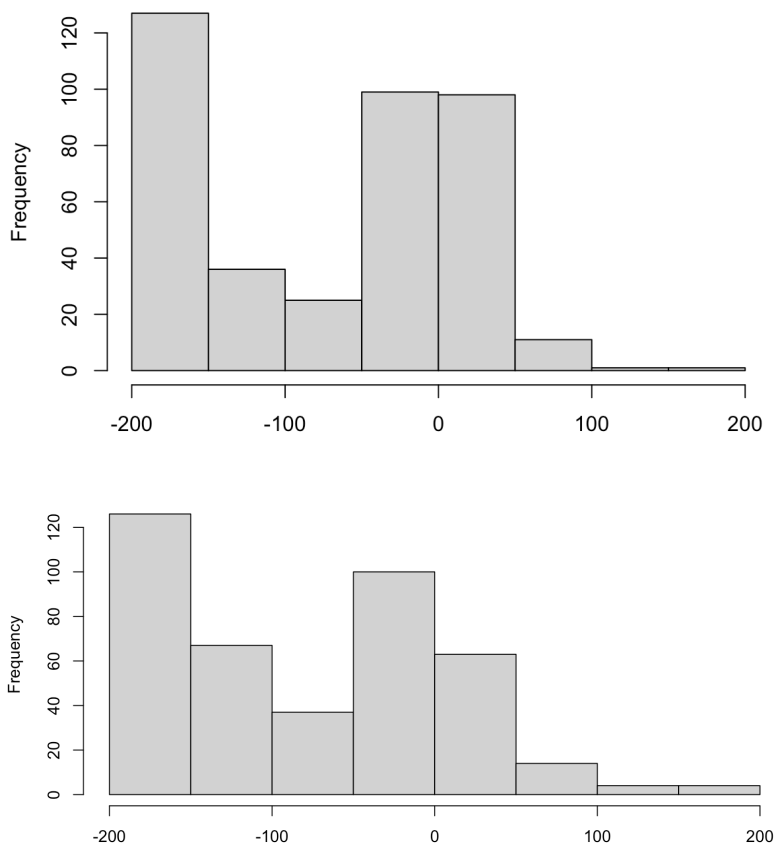
Study 2 NFCC * Probability of Trial Conviction



Note. The highest and lowest quartiles' lines are parallel, but the middle two quartiles' lines are steeper than the first and fourth quartiles' lines, suggesting that the mid-level-on-NFCC people are more reactive to PTC in making plea-bargain decisions.

SM 33.

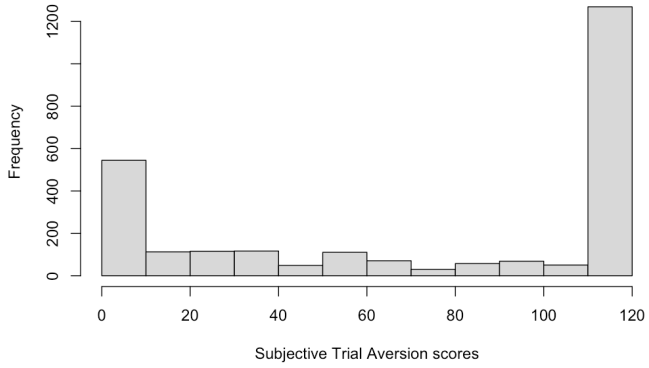
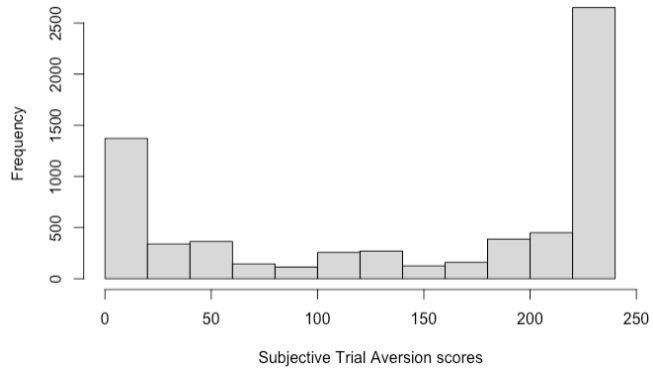
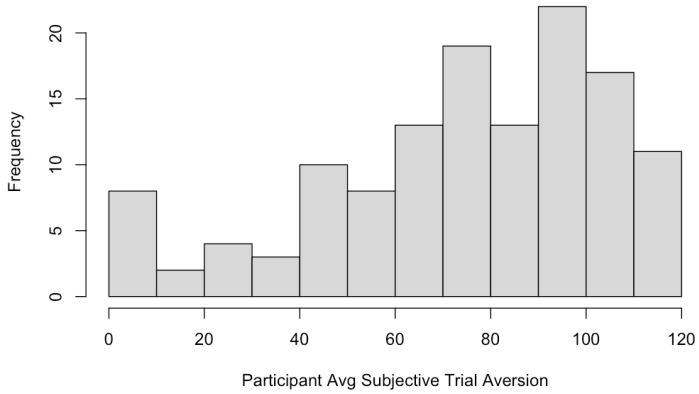
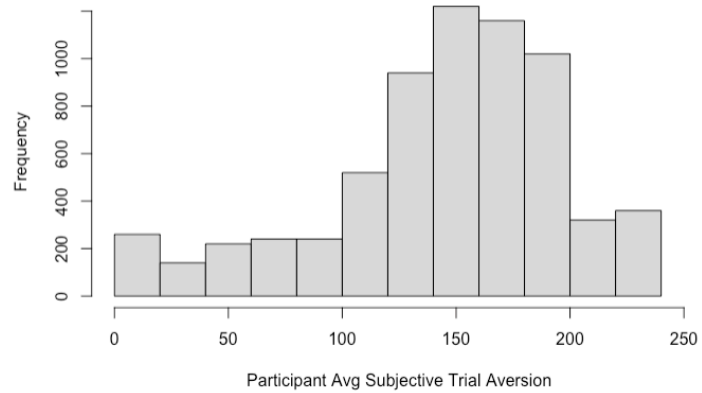
Studies 1–2 Negative Contemplative Emotions Distributions



Note. Study 1's NCE distribution appears in the left panel, and Study 2's NCE distribution appears in the right panel.

SM 34.

Studies' 2 and 3 Subjective Trial Aversion Distributions

	Study 2	Study 3
Raw Subjective Trial Aversion scores		
Participants' Average Subjective Trial Aversion scores		

SM 35.

Study 3 and 4's Scenario with Factual Innocence Manipulation

You were driving within the speed limit in a residential area, when you received a text from your friend. You picked up your phone and read the text. As you were typing your response, You used the voice-activation feature to read the text to you. As you were dictating your response, a child ran in front of your car, chasing a ball. You slammed on your brakes, but your vehicle struck the child, breaking his leg. The police were called and you have been charged with negligent driving resulting in physical injury, a felony.

While it is legal to send texts on your cell phone in hands-free mode, it is not legal to hand-type a text while driving. The cell phone technology can demonstrate that you received and sent text messages at the time of the accident, but it cannot establish whether the texts were hand-typed or voice-activated. However, a Fed-Ex delivery employee was in the vicinity during the accident and remembers your head was down with your gaze in your lap at the time of the incident.

Note. Innocent text is in green, and Guilty text is in gray.

SM 36.

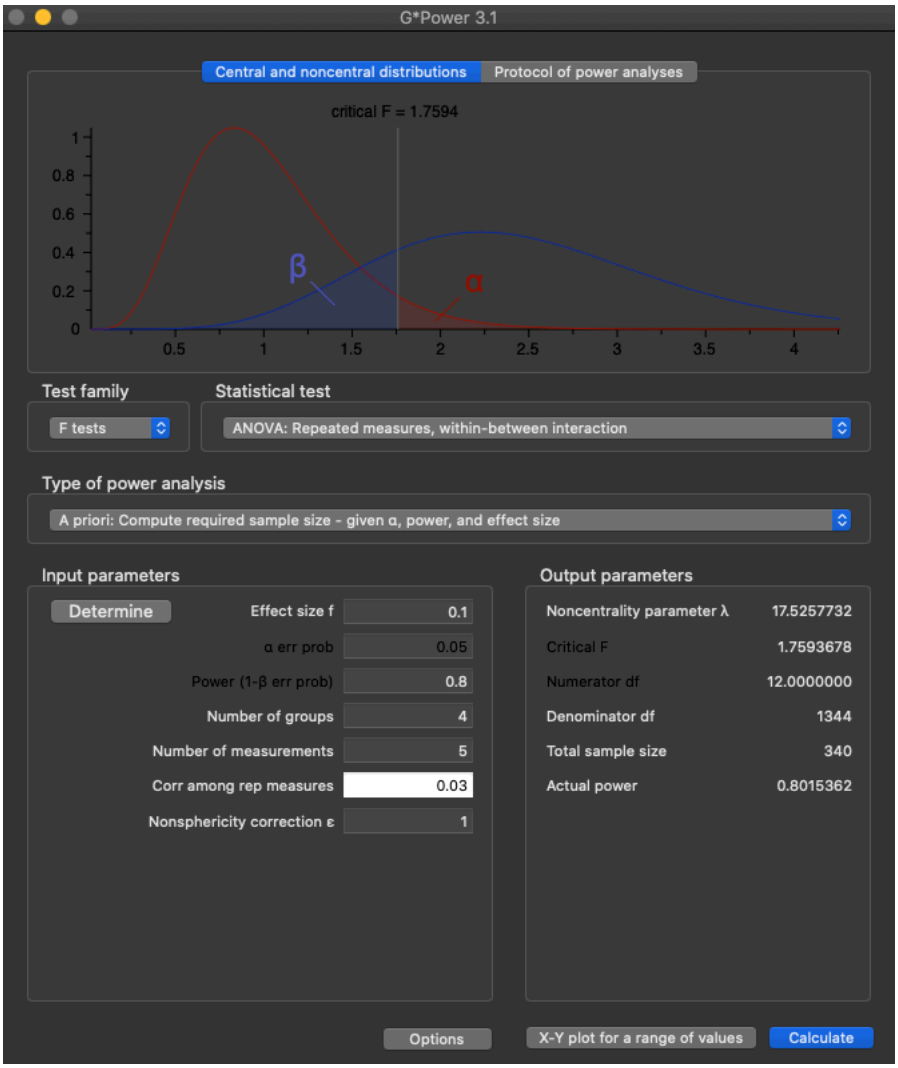
Studies 3–4 Procedural Justice Outcome Measure

Response scale: (1=not at all ___; 5=extremely ____)
*How much would you trust the plea bargain system in the future?
*Thinking about your plea bargain decisions, to what extent do you think it was conducted in a fair way?
*How fair was the outcome of your plea bargain decisions?
*Thinking about your plea bargain decisions, to what extent did you feel in control of what happened to you?
*How much control did you have over your plea bargain decision?
How much did you feel your attorney's advice addressed your concerns?

Note. Adapted from Hollander-Blumoff & Tyler (2008). Items marked with "*" were used in Study 3, and all the items were used in Study 4.

SM 37.

Study 3's G*Power Screenshot



SM 38.

Studies 3 & 4 New Legal-Decision-Making Instructions and Question Set-Up

You will now make a series of decisions between going to trial and accepting a plea deal. Below is background information about the decisions.

The prosecutor has decided to charge you with a **felony**, and is asking for a sentence of **8 months in prison** if you choose to go to trial. However, the prosecutor is offering a plea deal of a **gross misdemeanor, with a prison sentence.**

Background Information

- Taking a plea offer is effective immediately, whereas the decision to go to trial results in a delay of the sentence start date because trial does not start until **[DELAY]** from now, and the trial process could take up to a week.
- [Jail condition: During the time waiting for trial to start and complete you will be waiting in jail; note that credit for time served is at the prosecutor's discretion.] [Bail condition: During the time waiting for trial to start and complete you will be out on bail, preparing for trial, but otherwise maintaining your daily routines.]
- Based on the evidence, your lawyer thinks you have a **[PROBABILITY]% chance** you will be found **guilty** of the **felony** and be sentenced to **8 months in prison** (**[1-PROBABILITY]%** chance of being found not guilty).

page break

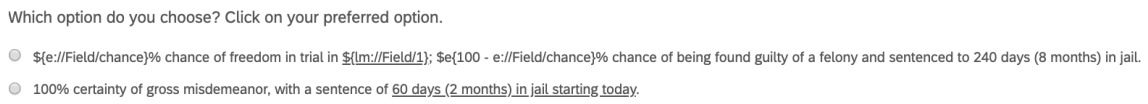
Instructions

You just read the background details of your two options (trial and plea). When you have made a decision, click on the radio button of the option you prefer. When you have clicked on the radio button your answer will be automatically recorded and new options will appear on the screen. **Your new options may differ slightly so please review them carefully.**

On the next page your first decision will appear.

page break

[Jail condition: During the time waiting for trial to start and complete you will be waiting in jail; note that credit for time served is at the prosecutor's discretion.] [Bail condition: During the time waiting for trial to start and complete you will be out on bail, preparing for trial, but otherwise maintaining your daily routines.]



Note. The text highlighted in blue is present only in the Jail conditions. The text highlighted in yellow is present only in the Bail conditions. The Jail/Bail manipulation only applies to Study 3, not Study 4, since Study 4 told all participants who they would be out on bail.

SM 39.

Studies 3 & 4 Legal Experience Questions

Have you had any experience in the legal system as a witness, party, juror, victim, attorney, or judge?

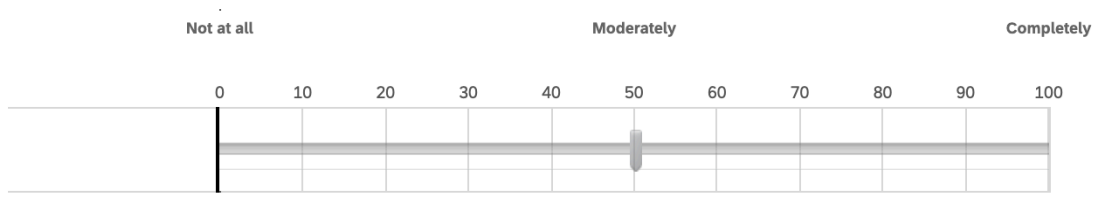
If yes, please indicate whether your experiences were civil cases, criminal cases, or both.

- **Criminal** cases involve prosecution by a government attorney (e.g., state or federal) for crimes committed, excluding parking or speeding tickets.
- **Civil** cases most commonly involve disputes between private citizens or businesses (e.g., divorce, breach of contract).

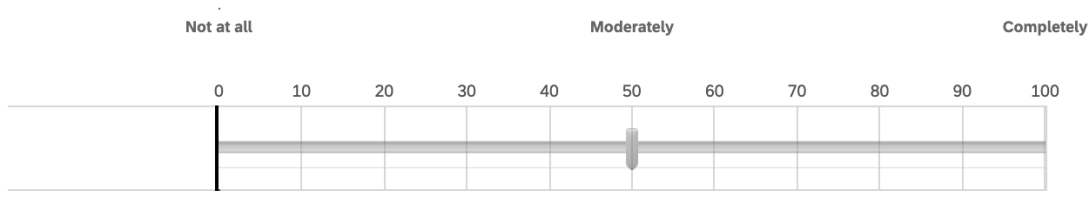
- ○ Yes, civil case experience only
- ○ Yes, criminal case experience only
- ○ Yes, **both** civil and criminal case experience
- ○ No, I have not had experience with civil or criminal cases
- ○ Prefer not to answer

Based on your experience(s) in the legal system, please answer the following questions.

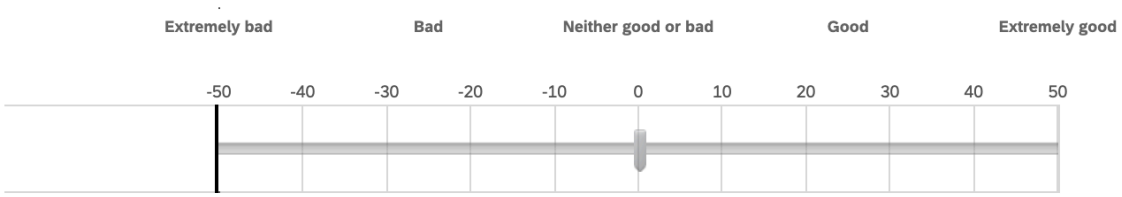
How much did you trust the **lawyers**?
From 0 (not at all) to 100 (completely).



How much did you trust the **judge**?
From 0 (not at all) to 100 (completely).



In general, how would you rate your overall experience(s) in the legal system?
From -50 (Extremely bad) to 50 (Extremely good).



Display this question

If Have you had any experience in the legal system as a witness, party, juror, victim, attorney, or... Yes, criminal case experience only Is Selected

Or Have you had any experience in the legal system as a witness, party, juror, victim, attorney, or... Yes, both civil and criminal case experience Is Selected

And

If Are you an attorney, judge, or other legal system administrator? Yes Is Selected

Or Are you an attorney, judge, or other legal system administrator? Maybe (please describe) Is Selected

What was your role in the criminal case(s)?

Select all that apply if you have been involved in multiple, but please **leave out** your role as an attorney, judge, or legal system administrator.

- [ ] I was the criminally charged defendant.
- [ ] I was a witness.
- [ ] I was a victim.
- [ ] I was a juror.
- [ ] Other *(please describe)*

Display this question

If What was your role in the criminal case(s)? Select all that apply if you have been involved in... I was the criminally charged defendant. Is Selected

Or What was your role in the criminal case(s)? Select all that apply if you have been involved in... I was the criminally charged defendant. Is Selected

When you were criminally charged, did you have to make a plea bargain decision?

- ○ Yes
- ○ Maybe
- ○ No
- ○ Prefer not to answer

Display this question

If When you were criminally charged, did you have to make a plea bargain decision? Yes Is Selected

Or When you were criminally charged, did you have to make a plea bargain decision? Maybe Is Selected

In your criminal case, what did you choose: to accept a plea deal or to go to trial?

This will help put your previous (hypothetical) choices in the survey in perspective.

- ○ I accepted the plea offer
- ○ I went to trial
- ○ Other
- ○ Prefer not to answer

When you made the decision to go to trial, how confident you were that you could persuade the following decision-makers to see the case from your perspective

	1 = Not at all Confident	2 = Slightly Confident	3 = Moderately Confident	4 = Very Confident	5 = Extremely Confident
Confident that you could persuade the **judge** to see the case from your perspective	○	○	○	○	○
Confident that you could persuade the **jury** to see the case from your perspective	○	○	○	○	○

Please rate your experience in making your **real-world** plea bargain decision.

If you have had to make more than than one real-world plea bargain decisions, respond about your experiences as a whole making those decisions.

	1 = Not at All	2 = Minimally	3 = Somewhat	4 = Mostly	5 = Completely
How satisfied are you with your past plea bargain decision?	○	○	○	○	○
How fair do you think your plea bargaining process was?	○	○	○	○	○
How involved was your attorney in your case?	○	○	○	○	○
How competent was your attorney?	○	○	○	○	○
How well did your attorney address your concerns about the process?	○	○	○	○	○
How involved was the judge in the process?	○	○	○	○	○

Display this question

If In your criminal case, what did you choose: to accept a plea deal or to go to trial? This will... I went to trial Is Selected

In your trial, did you testify?

- ○ Yes, I testified
- ○ No, and I didn't want to.
- ○ No, because my attorney didn't think it was a good idea.
- ○ Other
- ○ Prefer not to answer

Display this question

If What was your role in the criminal case(s)? Select all that apply if you have been involved in... I was the criminally charged defendant. Is Selected

Or What was your role in the criminal case(s)? Select all that apply if you have been involved in... I was the criminally charged defendant. Is Selected

While you were awaiting the resolution of your criminal case (through trial or a plea agreement), where were you waiting?

- ○ I was out on bail.
- ○ I was in jail.
- ○ Other
- ○ Prefer not to answer

CJ_3_OE

Do you think your experience (or the experience of someone close to you) with the criminal justice system has shaped your thoughts and feelings about it? If so, how?

SM 40.

Study 3 Correlations, ANOVAs, and Boxplots of Demographic Variables and Trait-Level Individual-Difference Measures

Study 3 Zero-Order Pearson Correlations

	Age	Imp.	Neg. Emot.	Blame.	Innoc.	Guilt
Age	1					
Impulsivity	-0.21***	1				
Negative Emotions	-0.12^{m}	0.14**	1			
Blameworthiness	0.01	0.04	-0.13*	1		
Innocence	-0.009	0.009	0.17**	-0.75***	1	
Guilt	0.0008	0.01	-0.14**	0.79***	-0.88***	1

Study 3 One-Way ANOVAs for Demographic Categories on Individual Differences

	Imp.	NCE	Blame.	Innoc.	Guilt
	M (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Gender	0.02	0.82	0.21	0.52	0.82
Men	6.81 (3.58)	-133.77 (72.77)	133.55 (64.87)	43.51 (35.88)	38. 42 (56. 35)
Women	6.76 (3.56)	-142,94 (63.92)	133.75 (67.67)	43.20 (38.42)	57. 20 (37.83)
Race	0.68	2.69^{m}	0.85	0.72	1.02
Black	6.41 (3.17)	-124.77 (76.68)	142.15 (63.65)	43.28 (36.30)	61.10 (36.78)
White	6.95 (3.69)	-139.92 (68.03)	132.23 (67.26)	41.66 (37.63)	57.04 (38.20)
Other	6.63 (3.76)	-153.72 (60.00)	128.17 (64.83)	48.91 (35.60)	51.11 (37.30)
Education	3.10*	0.69	0.92	1.72	1.66
High School	8.05 (3.71)	-142.36 (65.79)	148.13 (58.13)	31.90 (35.03)	63.92 (36.43)
Some College	7.44 (3.65)	-141.03 (60.93)	125.52 (68.76)	50.13 (38.24)	49.95 (38.83)
College Grad.	6.15 (3.26)	-142.05 (70.42)	132.5 (69.46)	43.06 (37.45)	55.97 (38.15)
Graduate Sch.	6.58 (3.76)	-127.49 (77.22)	137.12 (61.41)	41.98 (35.42)	62.19 (36.07)

Note. "NFCC" stands for Need for Cognitive Closure; "ASJS" stands for adjusted System Justification Scale; "NCE" stands for Negative Contemplative Emotions. The top panel shows the Pearson correlations between Age, Impulsivity, Negative Contemplative Emotions, Continuous Innocence, Continuous Guilt, and Blameworthiness. Age was significantly, and negatively, correlated with Impulsivity and marginally correlated with Negative Contemplative Emotions, meaning that older participants had lower Impulsivity scores and had more negative emotions about trial than younger participants. The

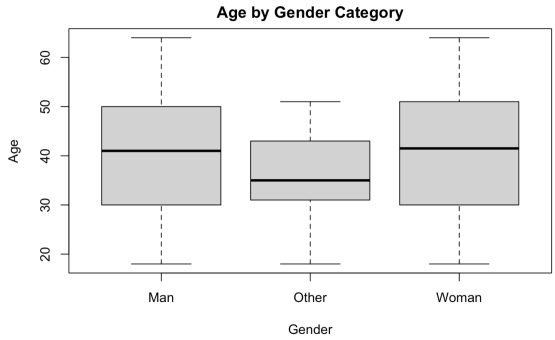
situation variables of Innocence, Guilt, Blameworthiness, and Negative Contemplative Emotions are all significantly correlated.

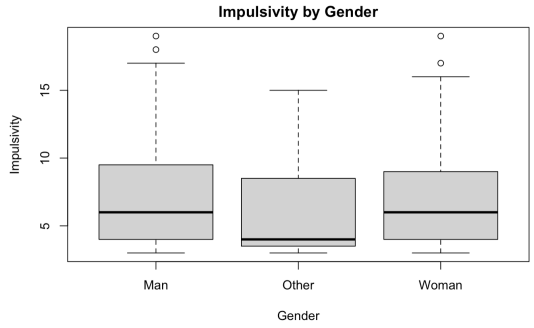
The lower panel shows the one-way ANOVAs conducted for Gender, Race, and Education on Age, Impulsivity, Negative Contemplative Emotions, Blameworthiness, Innocence, and Guilt. The only demographic variable that predicted any of these variables was Education. The rows of the table in the lower panel with variable names (e.g., Gender) have the F statistic, and the rows with variable-level names (e.g., Men) have the group mean and standard deviation.

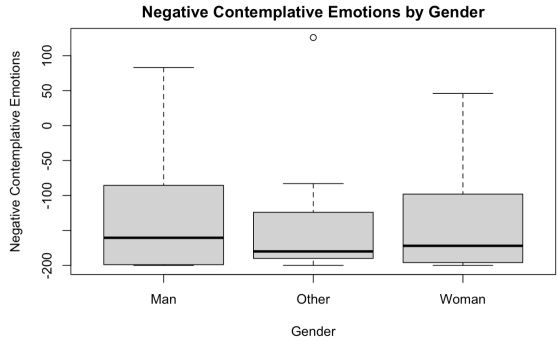
[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

SM 40. (continued)

Study 3 Individual Differences by Gender Category

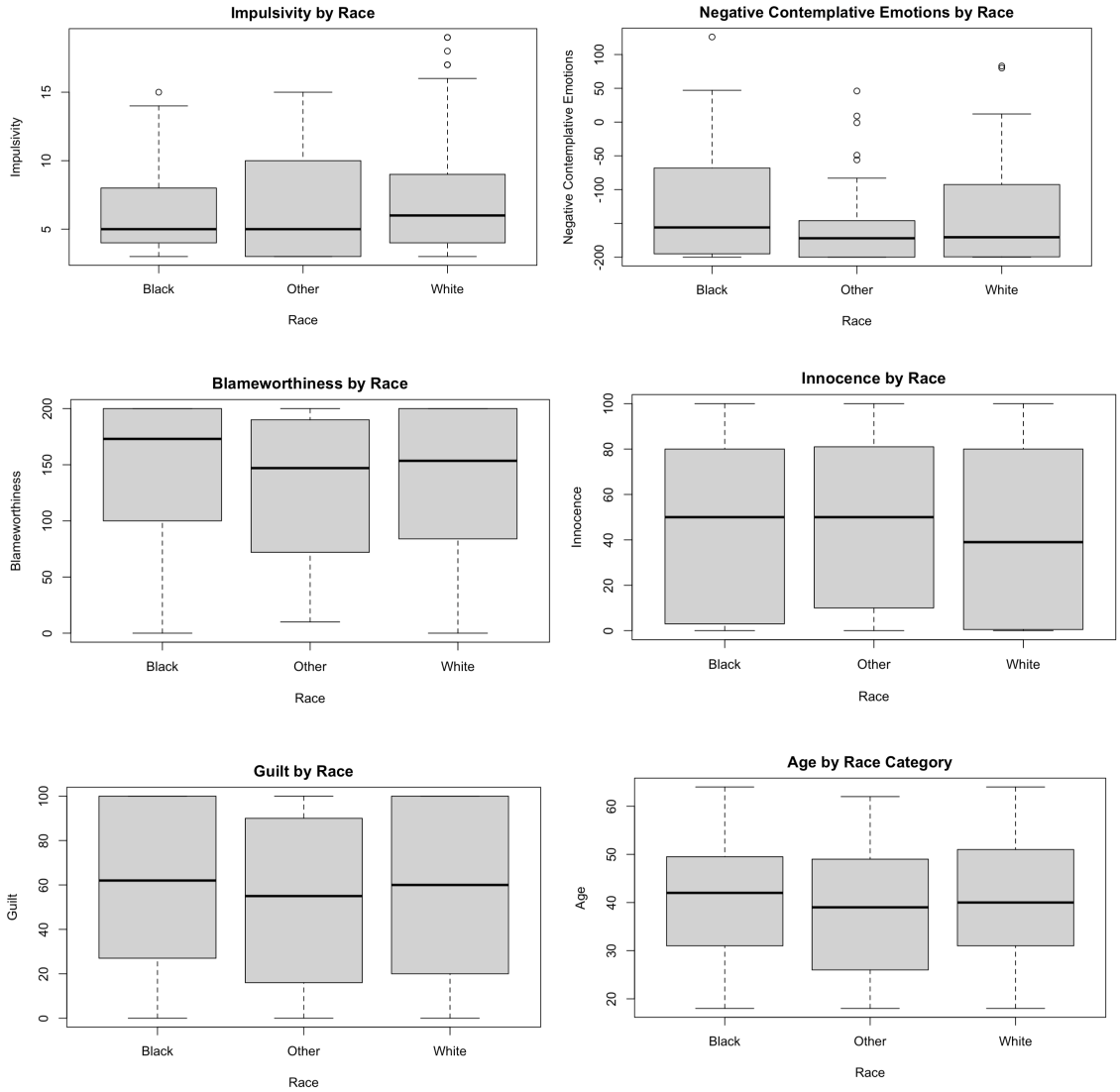






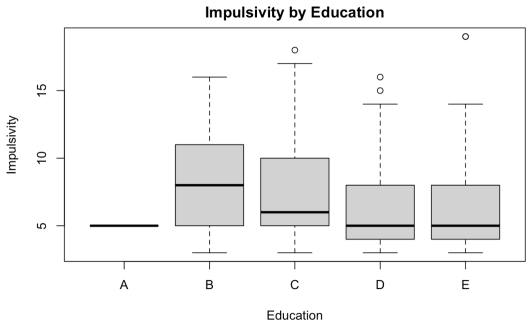
SM 40. (continued)

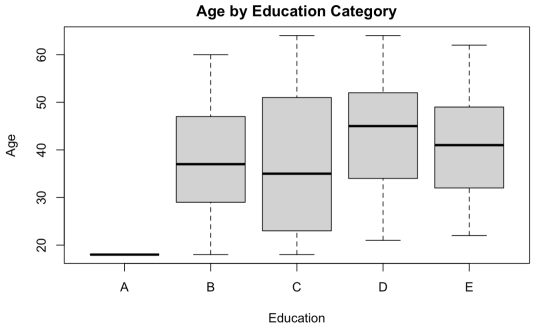
Study 3 Individual Differences by Race Category

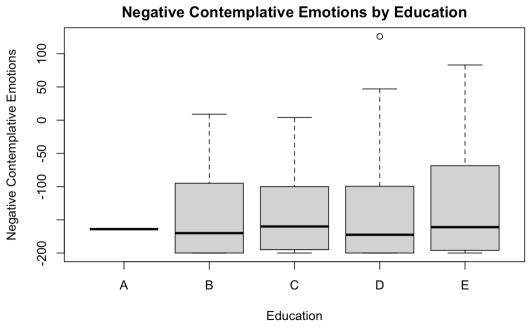


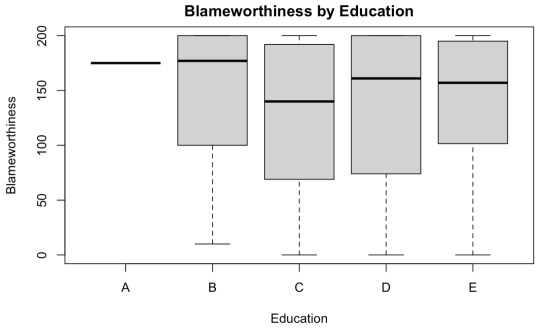
SM 40. (continued)

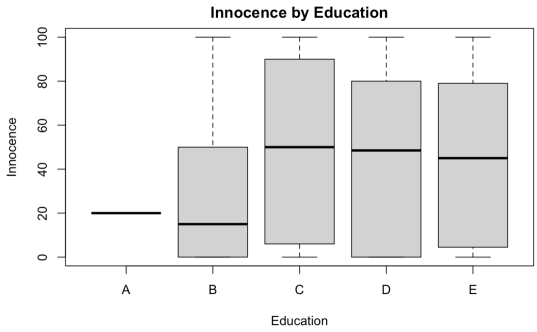
Study 3 Individual Differences by Education Category

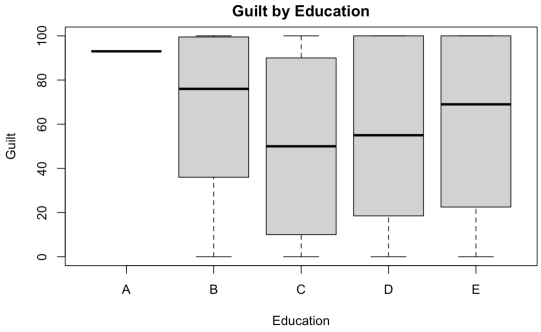












SM 41.

Study 3 Subject Trial Aversion by Gender

SM 42.

Study 3 Plea-Bargain Decision-Making Reasons Correlation Matrix

	Factor Importance: Factual Innocence	Factor Importance: Probability	Factor Importance: Delay	Factor Importance: Sentence	Factor Importance: Location
Factor Importance: Factual Innocence	1				
Factor Importance: Probability	-0.25**	1			
Factor Importance: Delay	-0.09[m]	.18**	1		
Factor Importance: Sentence	-0.04	.46**	.31**	1	
Factor Importance: Location	-0.01	.25**	.60**	0.48	1

[m].05 ≤ p ≤ .1. *p < .05. **p < .01. ***p < .001.

SM 43.

Study 3 Four-Way Interaction: Race, Probability of Trial Conviction, Delay until Trial, and Waiting-for-Trial Location

	Subjective Trial Aversion			
Models/Variables	*B*	*SE*	R^2_m	*95% CI*
PTC*DUT*Race*Location			0.38	
DUT	1.25	1.92		(-2.52, 5.01)
Race [Other]	-11.33	16.41		(-43.3, 20.66)
Race [White]	-3.59	10.96		(-25.0, 17.77)
Location [Jail]	-0.97	13.34		(-25.0, 26.98)
PTC	1.37***	0.07	0.04	(1.24, 1.51)
DUT:Other	3.35	3.39		(-3.28, 9.98)
DUT:White	-0.81	2.26		(-5.24, 3.62)
DUT:Jail	16.31***	2.75	0.003	(10.9, 21.70)
Other:Jail	-5.72	22.12		(-48.9, 37.39)
White:Jail	-4.12	15.65		(-34.6, 26.38)
DUT:PTC	-0.02	0.03		(-0.07, 0.03)
Other:PTC	0.39***	0.12	0.001	(0.16, 0.63)
White:PTC	0.11	0.08		(-0.05, 0.26)
Jail:PTC	-0.13	0.10		(-0.32, 0.06)
DUT:Other:Jail	10.69*	4.57		(1.76, 19.63)
DUT:White:Jail	3.35	3.23		(-2.98, 9.67)
DUT:Other:PTC	-0.04	0.05		(-0.13, 0.05)
DUT:White:PTC	0.003	0.03		(-0.06, 0.06)
DUT:Jail:PTC	-0.10**	0.04	0.001	(-0.18, -0.03)
Other:Jail:PTC	0.32*	0.16		(0.001, 0.63)
White:Jail:PTC	0.39***	0.11	0.001	(0.17, 0.61)
DUT:Other:Jail:PTC	-0.14*	0.06		(-0.27, -0.02)
DUT:White:Jail:PTC	-0.06	0.04		(-0.15, 0.03)

SM 44.

Study 3 Cross-Construct Multiple Regressions Model 1

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Model 1			0.28	0.65	
PTC	1.38***	0.04	.11		(1.31, 1.45)
DUT	0.11	0.10			(-0.07, 0.30)
WTL	0.95	6.43			(-11.62, 13.5)
PTC:DUT	-0.002	0.001			(-0.005, 0.0006)
PTC:WTL	0.15**	0.05			(0.06, 0.25)
DUT:WTL	2.02***	0.13	0.02		(1.76, 2.29)
PTC:DUT:WTL	-0.02***	0.002	0.01		(-0.02, -0.01)
Innocence	-37.22***	6.05	0.02		(-49.06, -25.4)
PTC:Innocence	0.24***	0.04			(0.18, 0.32)

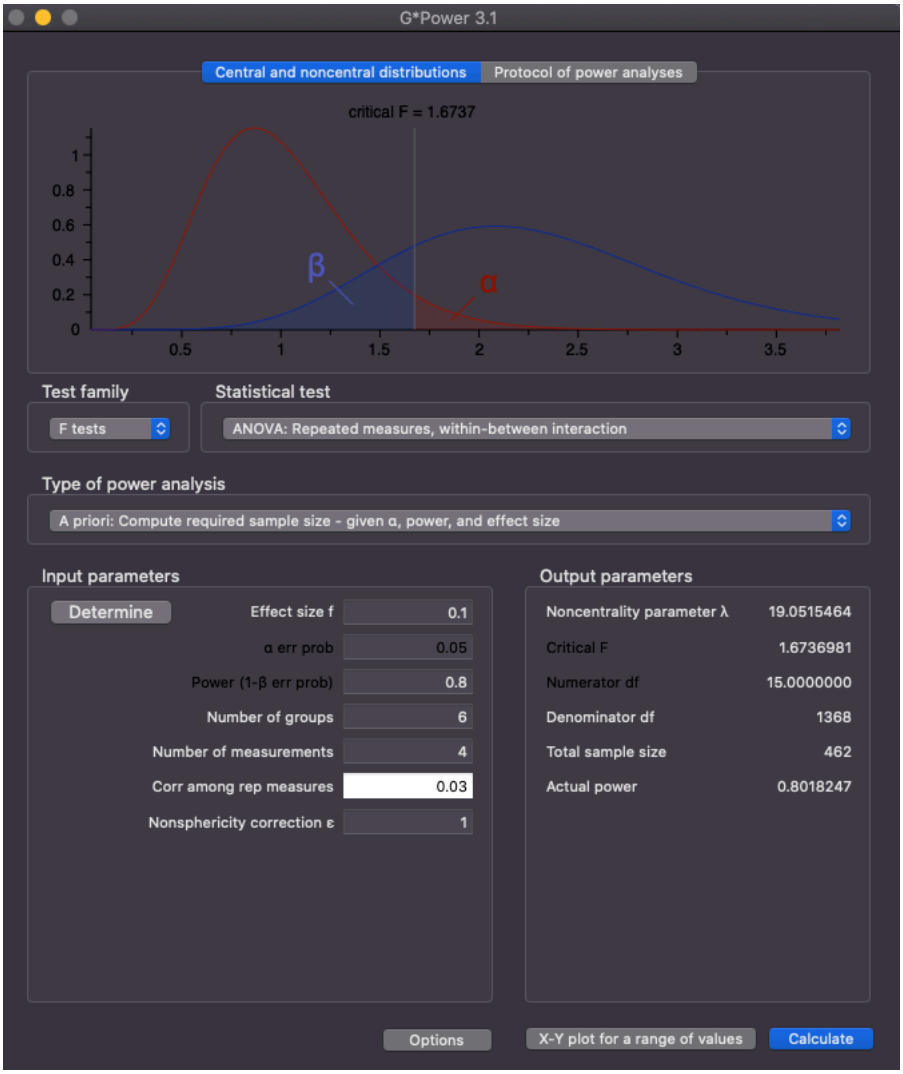
SM 45.

Study 3 Cross-Construct Multiple Regressions Model 3

	Subjective Trial Aversion				
Models/Variables	*B*	*SE*	R^2_m	R^2_c	*95% CI*
Model 3			0.39	0.65	
PTC	1.38***	0.04	0.11		(1.30, 1.45)
DUT	0.12	0.10			(-0.07, 0.31)
WTL	0.49	6.45			(-12.04, 13.00)
Innocence	-39.60***	6.07	0.02		(-51.38, -27.8)
Gender [Other]	34.26[m]	19.68			(-3.89, 72.4)
Gender [Women]	6.39	5.69			(-4.64, 17.4)
Race [Other]	22.98*	9.65	0.01		(4.27, 41.7)
Race [White]	12.06[m]	6.80			(-1.12, 25.2)
Personal Involvement_Adj.	-1.17	1.06			(-3.22, 0.87)
Personal Involvement_Beh.	-0.61	0.50			(-1.58, 0.36)
PTC:DUT	-0.002	0.001			(-0.005, 0.0005)
PTC:WTL	0.14**	0.05			(0.05, 0.24)
DUT:WTL	2.01***	0.13	0.02		(1.75, 2.28)
PTC:Innocence	0.26***	0.04			(0.19, 0.33)
PTC:DUT:WTL	-0.02***	0.00			(-0.02, -0.01)

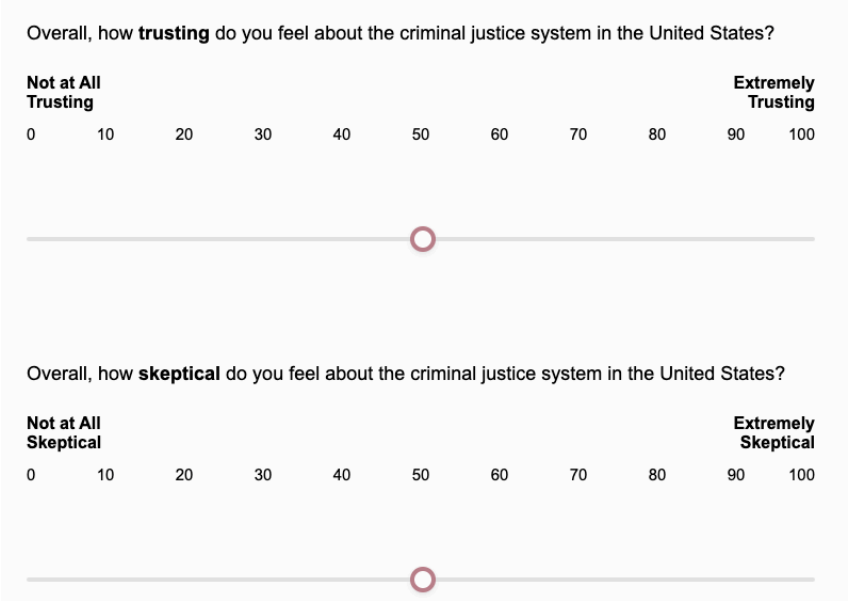
SM 46.

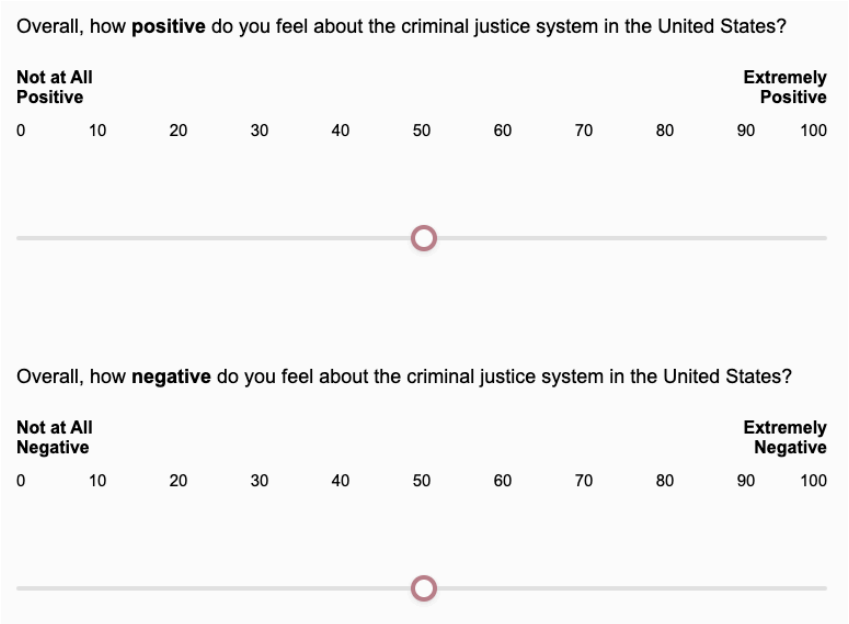
Study 4 G*Power Screenshot



SM 47.

Study 4 Criminal Justice System Beliefs





To what extent do you **agree or disagree** with the following statements?

Overall, **plea bargaining** in the criminal justice system coerces people to give up their right to a trial.

Strongly Disagree — **Neither Agree Nor Disagree** — **Strongly Agree**

0 10 20 30 40 50 60 70 80 90 100

Overall, **plea bargaining** in the criminal justice system coerces innocent people into falsely admitting guilt.

Strongly Disagree — **Neither Agree Nor Disagree** — **Strongly Agree**

0 10 20 30 40 50 60 70 80 90 100

Overall, **plea bargaining** in the criminal justice system is efficient in a system that is overburdened.

Strongly Disagree — **Neither Agree Nor Disagree** — **Strongly Agree**

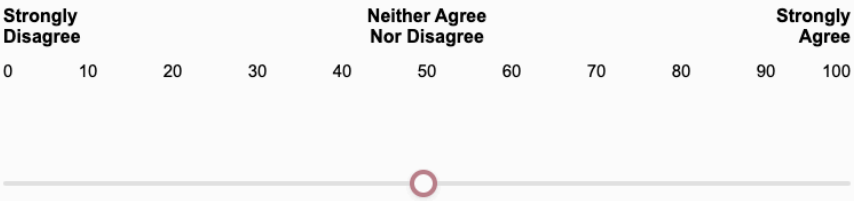
0 10 20 30 40 50 60 70 80 90 100

Overall, **plea bargaining** in the criminal justice system coerces people to admit guilt.

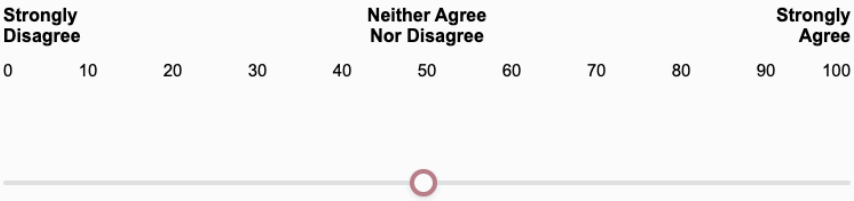
Strongly Disagree — **Neither Agree Nor Disagree** — **Strongly Agree**

0 10 20 30 40 50 60 70 80 90 100

Overall, **plea bargaining** in the criminal justice system allows defendants to make their own decisions.

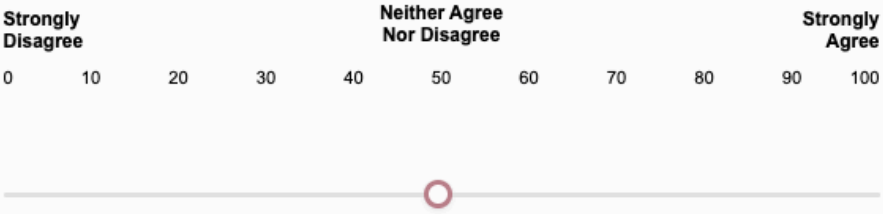


Overall, **plea bargaining** in the criminal justice system enables guilty people to get a lesser sentence.

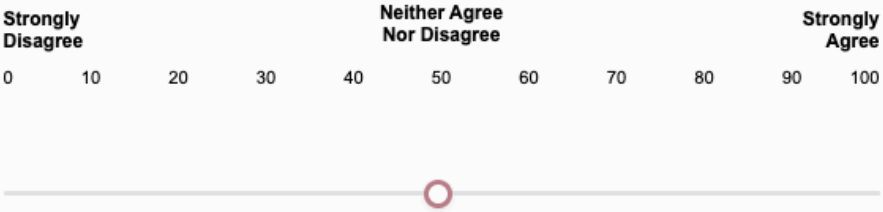


To what extent do you **agree or disagree** with the following statements?

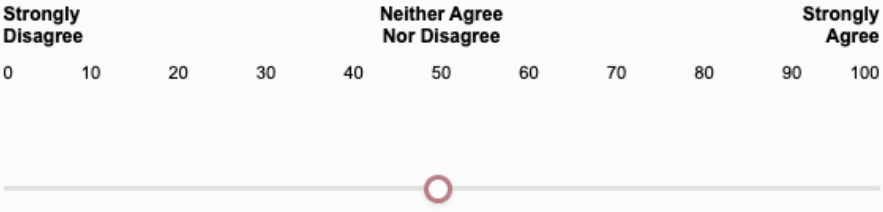
Overall, **trials** in the criminal justice system are an important Constitutional right.

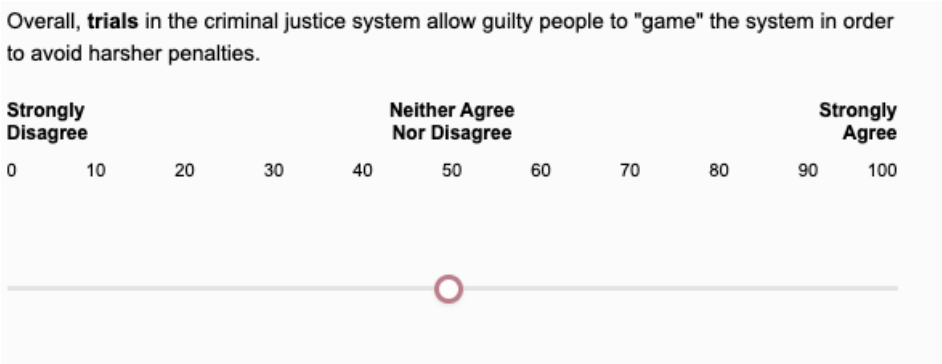


Overall, **trials** in the criminal justice system enable innocent people to fight for their freedom.



Overall, **trials** in the criminal justice system give people the opportunity to share their point of view about what happened.





Note. The first four questions were presented in random order. The plea-bargaining-specific questions were presented in random order, as were the trial-specific questions. The plea-bargaining and trial groups of questions were presented in random order to reduce the chance of order effects.

SM 48.

Study 4 Legal Cynicism

Please rate your level of (dis)agreement with the following statements.

	Strongly Disagree 1	Disagree 2	Neither Agree Nor Disagree 3	Agree 4	Strongly Agree 5
All laws should be strictly obeyed.	○	○	○	○	○
The laws in your community are consistent with your own intuitions about what is right and just.	○	○	○	○	○
It is hard to break the law and keep your self-respect.	○	○	○	○	○
People should do what the law says.	○	○	○	○	○
The police are not doing a good job in preventing crime in my city.	○	○	○	○	○
Obeying the law ultimately benefits everyone in the community.	○	○	○	○	○
A person who disobeys laws is a danger to others in the community.	○	○	○	○	○
The laws of our system are generally consistent with the views of the people in your community about what is just and right.	○	○	○	○	○
The police are not able to maintain order on the streets and sidewalks in my city.	○	○	○	○	○

SM 49.

Study 4 Decision-Making Reasons' Correlation Matrix

	Factor_innoc	Factor_prob	Factor_delay	Factor_sent	Factor_loc	Factor_atty	good_false_plea	ood_guilty_tri	like_immed	like_delay	Factor_sent
Factor_innoc	0.00										
Factor_prob	-0.06	0.00									
Factor_delay	0.12	0.15	0.00								
Factor_sent	0.03	**0.59**	**0.26**	0.00							
Factor_loc	0.21	**0.23**	**0.55**	**0.35**	0.00						
Factor_atty	0.14	**0.38**	**0.36**	**0.32**	**0.41**	0.00					
good_false_plea	0.07	-0.04	0.30	-0.03	0.22	0.25	0.00				
good_guilty_trial	0.11	0.05	0.05	0.08	0.02	0.08	0.08	0.00			
like_immed	0.07	0.15	0.09	0.23	0.07	0.21	0.15	0.00	0.00		
like_delay	0.09	0.03	**0.38**	0.14	**0.33**	0.17	**0.28**	0.07	-0.15	0.00	
Factor_sent	0.05	**0.47**	0.24	**0.72**	**0.30**	0.26	0.00	0.13	0.20	0.15	1.00

SM 50.

Study 4 Advice Content x Factual Innocence T-test Matrix

	Advice Content		*t*
	Trial *M* (*SD*)	**Plea** *M* (*SD*)	
Factual Innocence			
Innocent	34 (7.15)	31.36 (7.51)	-1.56
Guilty	35.48 (6.33)	36.59 (8.21)	.72
t	.88	2.91**	